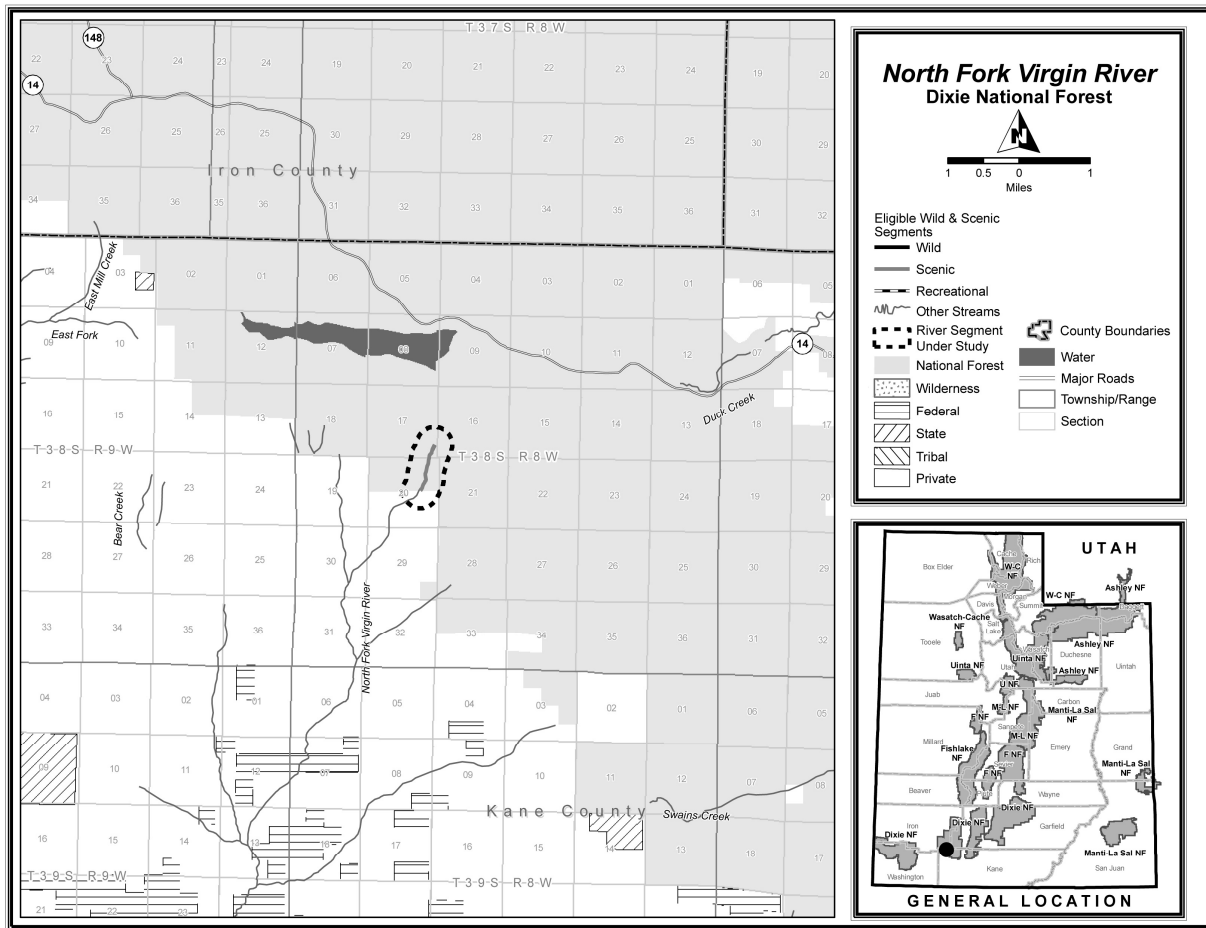


North Fork Virgin River Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: North Fork Virgin River

River Mileage:

North Fork Virgin River

Studied: 25 miles, from its head waters to confluence with the Virgin River

Eligible: 0.68 miles, from its headwaters to the Forest boundary

Location:

North Fork Virgin River	Dixie National Forest, Cedar City Ranger District, Kane County, Utah		Congressional District 2	
	Start	End	Classification	Miles
Segment 1	NW ¼ SE ¼ Sect. 17, T 38 S, R 8 W, SLM	SW ¼ NW ¼ Sect. 20, T 38 S, R 8 W, SLM	Scenic	0.68

Physical Description of River Segment:

The North Fork of the Virgin River begins at Cascade Falls, a perennial spring that is fed by Navajo Lake through underground lava tubes and a limestone solution channel. Cascade Falls is located in the Pink Cliffs on the south edge of the Markagunt Plateau. From here, the river flows as a boulder dominated, cascading to step-pool stream system through the Cretaceous rocks of the Grey Cliffs before cutting down

through the Kolob Terrace into the Jurassic and Triassic rocks that define the regional landscape and Zion National Park. The stream corridor supports a diverse riparian plant community. Near Cascade Falls the watershed supports an abundance of bristlecone pine trees.

ELIGIBILITY

Name and Date of Eligibility Document: Fishlake and Dixie National Forest Wild and Scenic River Evaluation (Pg. 16)

Determination of Free-flow: There are no known diversions of the North Fork of the Virgin River on the National Forest.

Summary of Outstandingly Remarkable Values:

Scenic and Geological – The North Fork of the Virgin River begins at Cascade Falls, a spring that is fed by Navajo Lake through underground lava tubes and limestone solution channel. The river flows down the south face of the Markagunt Plateau through high elevation landscapes of Jurassic and Cretaceous sediment deposits, with extensive viewsheds and examples of stream erosion in Utah including views of Zion National Park. The upper portions of the watershed are located amidst the pink cliffs of the Virgin River rim. The stream corridor supports a diverse riparian plant community. Near Cascade Falls the watershed supports an abundance of bristlecone pine trees.

Recreational – The North Fork of the Virgin River provides a unique recreational opportunity for hiking, sightseeing, and studying the ecology of Southern Utah. The Cascade Falls National Recreation Trail (#32055) is one of the most popular and heavily used trails on the Dixie National Forest. The trail terminates at a viewpoint looking directly into the limestone cavern from which water exits onto the steep slope below, thus forming Cascade Falls. The Virgin River Rim Trail (#32011) also provides visitors a view of the river segment as it traverses the Virgin River rim above the falls.

CLASSIFICATION

Basis for the classification of river: Scenic

No vehicular access to the river exists on National Forest. A four-wheel-drive road provides access to private property below the Forest Service boundary. The Cascade Falls Trail (#32055) begins at a trailhead 0.8 mile southeast of the falls and terminates at a viewing platform. Most of the river segment is not easily accessible from the trail.

SUITABILITY REPORT

Landownership and Land Uses – The entire river corridor is located on the Cedar City Ranger District of the Dixie National Forest

River Mile	Ownership
0 – 0.68	Dixie National Forest (Cedar City Ranger District)

Mineral and Energy Resource Activities – There are no existing salable, locatable, or leasable mineral and energy resources development in the eligible segment. The NW corner of section 21 is, however, in a Utah Coal Land Withdrawal Area and is withdrawn from appropriation. The area is considered to have low potential for oil and gas resources.

Water Resources Development – There are no known existing water developments (dams, diversions or channel modifications) on this segment. Due to the steep terrain and limited access to the river, the potential for hydroelectric power generation is low. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – The North Fork of the Virgin River flows in a

southern direction on the National Forest. No vehicular access to the river exists on the National Forest. A four-wheel-drive road provides access to private property below the Forest Service boundary. The Cascade Falls Trail (#32055) provides access to a viewpoint at Cascade Fall. The trail is 0.80 miles long and is recognized as a National Recreation Trail. The trail begins at the trailhead that is located at the ending terminus of Forest Service Road #054. The trailhead is also accessible by the Virgin River Rim Trail (#32011) and the Markagunt ATV System (Trail #51). The trailhead facilities include restrooms and a large parking area.

Grazing Activities – The entire river segment is located in the North Fork Allotment (#00211). The allotment consists of 1967 acres and is currently vacant. The allotment has a capacity of 50 head of cattle and was last grazed in 1994 by 16 head of cattle.

Recreation Activities – The North Fork of the Virgin River provides a unique recreational opportunity for hiking, sightseeing, and studying the ecology of Southern Utah. The Cascade Falls National Recreation Trail (#32055) is one of the most popular and heavily used trails on the Dixie National Forest. The trail terminates at a viewpoint looking directly into the limestone cavern from which water exits onto the steep slope below, thus forming Cascade Falls. The Virgin River Rim Trail (#32011) also provides visitors a view of the river segment as it traverses the Virgin River rim above the falls.

Other Resource Activities – The river corridor is relatively small in size and located within rugged steep terrain. Below the Virgin River Rim, there is a notable die off of Douglas fir trees due to drought, age, and beetles. In the future, district managers may pursue projects (e.g., helicopter logging) to enhance scenery of the area. Other resource activities in the area are not foreseeable.

Special Designations – The Cascade Falls Trail (#32011) that accesses the eligible segment is one of over 900 trails listed as a National Recreation Trail. This trail was recognized for its caves, geological features, meadows, scenic viewpoints, valleys/canyons, and waterfall. The trail was designated as a National Recreation Trail on November 16, 1979.

Approximately 0.7 miles of this stream is recognized by the State of Utah as a Drinking Water Source Protection Zone. This designation defines the area where contaminants are limited from the surface and subsurface areas surrounding a surface source of drinking water supplying a public water system (PWS), over which or through which contaminants are reasonably likely to move toward and reach the source. Surface water means all water which is open to the atmosphere and subject to surface runoff, and subsurface water relates to any well, spring, tunnel, adit, or other underground opening from or through which groundwater flows or is pumped from subsurface water-bearing formations.

Socio-Economic Environment – The river segment, associated National Recreation Trail, and corridor are all located within Kane County. Local visitors and adjacent landowners in the North Fork area also come from Iron County to the west and Garfield County to the north. There are almost 1,000 cabins in this area. A growing number of these cabins are inhabited year round. If incorporated the Duck Creek Village area would have the potential to be the largest town in Kane County. Garfield County and Kane County contain gateway communities to large, heavily visited, and internationally significant and known national parks (Bryce Canyon, Grand Canyon, and Zion National Parks). Utah Heritage Highway 89 was designated by law by President George W. Bush. The highway connects Kane and Garfield counties near the river segment. It was designated to promote economic development and preserve the unique pioneer traditions of the area for future generations. Garfield and Kane County are largely rural counties where traditional natural resource economic endeavors have dominated historically. In recent years, there has been a growth in recreation, tourism, and services. Iron County is a fast growing urban area with a strong diversified economy.

Garfield, Iron, and Kane counties are all struggling to retain rural traditions and lifestyles as well as “working” connections with the land. In the face of rising land values and globalization, traditional industries such as farming and ranching are becoming more difficult.

One manifestation of these trends is the rise in second home ownership; the private lands near the North Fork Virgin River are increasingly occupied by residents from out of the area. Over 50% of the tax notifications in the three counties were sent out of county, many of them out of state, and even out of country. Educating these occasional land users about special values and proper use is becoming more difficult.

More specifically, trends and conditions by county:

Garfield County, the fifth largest county in the state has the highest percentage of federal land (over 90%) in a county in the state of Utah.¹ The county contains over one million acres of National Forest System lands (including the Box-Death Hollow Wilderness Area) and large areas of other federal land, including portions of Grand Staircase-Escalante National Monument, Bryce Canyon National Park, Capitol Reef National Park, and Glen Canyon National Recreation Area. There are only about 170,000 acres of private land in the county. Public lands provide both challenges and opportunities for economic development in the county. The county is sparsely populated and is only projected to grow at a 1.0 percent rate between 2005 and 2050, a rate below the state average.

According to a 2003 Utah Bureau of Economic Analysis Report, Garfield County residents had one of the five lowest levels of total personal income in the state for 2003. Additionally, Garfield County had the second highest unemployment rate (10.8 percent) in the state according to 2003 Utah Department of Workforce Services information, exceeded only by Emery County's 11.0 percent unemployment rate (2003). Slow job growth and unemployment are recurrent problems for the county. Traditionally, county residents have relied primarily upon ranching and timber. While there is a desire to retain these traditional sources of economic opportunity, services related to recreation and tourism are growing quickly in the county.

Services are projected to increase from a 30.1 percent share in the Garfield County economy in 2005 to a 37.8 percent share in 2030 (State of Utah 2003).

According to Garfield County, the growth in the recreation and tourism industries has not been strong enough to provide the economic growth that has been achieved in more diverse parts of the state (Bremner 2006).² While these services (mostly related to leisure and hospitality) represent the largest sector in the Garfield County economy, government jobs (the sector ranked second) make up a much higher percentage of payroll wages (State of Utah 2003). There is a perception that leisure and hospitality jobs will not pay as much as jobs in other more traditional sectors.³ According to Garfield County, "... Garfield County is struggling economically. Schools are showing declining enrollment, and additional natural resource based industries have been all but eliminated in the county. . . Garfield County is struggling and unless changes [in land management and opportunities] are made relatively soon, things will get tougher" (Bremner 2006). Also according to Garfield County Commissioner Maloy Dodds in testimony to Congress, "...most tourist-generated jobs generally are minimal skill, minimum wage jobs – not the kind that can support a family." Another important fact that the Commissioner noted, "Federal

³ In the book *Visions of the Grand Staircase-Escalante* (compiled at the time of the Grand Staircase-Escalante National Monument planning process in the 1990s), Gail Blattenberger and David Kiefer acknowledge, "[m]inimum wages plus tips at Ruby's Inn are what the locals [in Garfield County] envisage from the service industry, but high tech service enterprises are also viable given an investment in communications infrastructure." Blattenberger and Kiefer suggest that while based on past performance "economic well-being" is clearly an issue in Kane and Garfield counties, "[e]xtractive industries are not an optimal or even a viable solution to the economic situation in these counties." Furthermore, "change will certainly come to these economies" and be met with "resistance (because of) the desire for a land-based economy (which is) seen as crucial to the quality of life in the rural West." According to the authors, the key is to "find ways of preserving our land-based Western heritage and lifestyle (which are so important to rural residents) along with the natural treasures of the countryside." Roughly 10 years later, we seem to face the same conditions, trends, attitudes, fears, opportunities, and challenges (Blattenberger and Kiefer 1998).

destination areas [are] a mixed blessing at best” for Garfield County because increased visitors can be a burden to the county in terms of increased cost of garbage and search and rescue operations (Testimony to House Resources Committee’s Forest and Forest Health Subcommittee, June 15, 2005).

The closest community to the North Fork Virgin River, Hatch Town, is not expected to grow by more than 100 people in the next fifty years (2005 State of Utah Baseline projections).

Iron County has the largest acreage of available private lands of all the counties in the planning area. More specifically, there is a large amount of private land located from the Dixie National Forest boundary south to Zion National Park. Once North Fork Virgin River exits the forest, it flows across this private land before entering Zion National Park. Nonetheless, well over 50 percent of the county is comprised of federal land, including 200,000 acres of National Forest System land (including the Ashdown Gorge Wilderness Area). Iron County is one of the fastest growing areas of the state. From 2004 to 2005 Iron County grew at a rate of 6.4 percent (exceeded only by its neighbor to the south, Washington County, which grew at 8.4 percent) (State of Utah 2006). In a press release to announce these growth rates, the Governor states, “The southwestern counties of Washington and Iron, where the urban cities of St. George and Cedar City are located, experienced rapid growth in 2005. These are considered high amenity counties, offering a diversity of educational, tourism, retirement, and economic opportunities for local residents. Both Iron and Washington counties experienced population growth over twice the state rate in 2005,” (State of Utah 2005c). Population in Iron County is projected to grow from 40,212 in 2005 to 103,920 in 2050 – a 2.3 percent annual increase (one-half a percent above the statewide projection).

Government is the largest sector of the Iron County economy, but the service sector is projected to grow the fastest through 2030. The *People and the Forests* report projects services to grow from a 21.6 percent share in the Iron County economy to a 25.5 percent share in 2030. Government jobs are projected to retain about a 21 percent share (State of Utah 2003). Overall, Iron County has a relatively balanced and broad-based economy. County businesses have learned to leverage their unique geographic location in close proximity to several national parks and other public lands, and the presence of Southern Utah University and the Utah Shakespearean Festival to support economic development and growth. There is concern that rapid growth may compromise high quality of life that county residents have come to appreciate.

There is a proposal to reopen the historic iron mines west of Cedar City, though it remains to be seen if this development will proceed. Mineral development of iron ore could provide future growth. Despite a robust economy and high growth rate, Iron County continues to struggle with issues of poverty. According to *People and the Forests*, the Iron County poverty rate in 1999 was double the state rate. Furthermore, in the period from 1989 to 1999, Iron County saw its poverty rate increase, while the state saw a decrease of the population in poverty (State of Utah 2003).

Kane County is another county that is dominated by federal land, the majority of which is managed by the BLM. Although almost 85 percent of the county is managed by federal land management agencies, the Forest Service manages only about 125,000 acres.⁴ Kane County experienced a 2.6% growth rate in 2004-05, this exceeds the State’s rate of 2.0% (State of Utah 2006). State population projections anticipate that Kane County will continue to grow at 1.4 percent annually from 2005 to 2050, below the state average of 1.8 percent (State of Utah 2005). The Kane County Commission feels that this projection is very low. The Commission believes that they are seeing a great deal of spillover growth from Washington County. Additionally, the Commission suggests that rapid growth in neighboring Fredonia, Arizona, should be noted because Kanab and Fredonia are in such close proximity that residents of the areas compete for the same jobs and other resources (Hulet 2006). Nonetheless, much of the growth in Kane County will likely be found in areas adjacent to or surrounded by National Forest System lands. Duck Creek Village, one of the largest communities surrounded by the Dixie National Forest, continues

⁴ Kane County maintains a close relationship with the Kaibab National Forest across the state border in Arizona.

to grow rapidly, creating challenges for both the county and the Forest Service.⁵

Some of the economic fortunes of Kane County seem to be improving. Kane County had one of the higher percent changes in the state in personal income from 2000 to 2003 (Bureau of Economic Analysis 2003). Some – including the Kane County Commission – suggest that this number is heavily influenced by retirees. They also suggest that annual income and working wages are going down in the county, an issue of much concern for the County Commission (Hulet 2006). As with many other counties in the planning area, Kane County is projected to rely more heavily upon the service sector in the future. As in Garfield County, the leisure and hospitality sector provides the most jobs in the county, but the government sector makes the largest contribution to payroll wages (State of Utah 2003).

The closest incorporated communities to the North Fork Virgin River in Kane County—Alton, Glendale, and Orderville—are expected to double in size from about 1,000 residents collectively to about 2,000 residents collectively in the next fifty years (2005 Utah Baseline Population Projections).

Current Administration and Funding Needs if Designated – The current administering agency is the USFS. If downstream segments were designated, then Kane County, Washington County, and Iron County, along with private land owners and the National Park Service could partner in management.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

There is not known demonstrated commitment to share in the costs of administering the river as part of the National System.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Several of the private ranches downstream from the forest river segment are in conservation easements. These conservation easements are designed to control population growth, enhance vegetation and water quality, and protect river related values. These easements were created prior to this process, but would likely help to protect values of the river segment. Some of the properties that are not currently under conservation easement are considering similar easements for the future.

According to Kane County Planning and Zoning Department, most the ranch properties downstream from the forest in the area are zoned for 40 acre ranches. This is called Recreation/Residential 36 and used to be called Forest Recreation 40. There are a few stray small ranch properties. The Kane County General Plan indicates, "Protection of watersheds is critical to the continued development of the county" (page 35).

(3) Support or opposition to designation.

⁵ "A substantial amount of lands in the higher elevation forest lands have been developed for recreation homes and cabins, and many are being used year-round," explains the 1999 Kane County General Plan. That plan states that the county does not intend to provide municipal level services to these areas.

The North Fork Virgin River drainage contains some historic ranch property. There seems to be a tendency in the area towards conservation of the historic landscapes.

During the public process for the Dixie and Fishlake National Forest eligibility process, public meetings were held at Ruby's Inn and in St. George, Utah. The public did not make any "support or opposition" statements during this public process. The Kane County Commission and the Forest Service did a field trip to the area on July 6, 2004. The Commission expressed concerns related to downstream private properties, potential fire in the area, and manageability of such a small segment. Additional concerns were expressed concerning whether or not the stream has flow in drought years or if it had regular flow before the Navajo Lake dike was created in the 1920s. Commissioners also suggested that access and development levels suggest that the tentative classifications should be scenic rather than wild. Overall, however, the Commissioners said that it was a place worthy of serious consideration on both eligibility and suitability grounds (notes from Field Trip).

In 2007, Senator Robert Bennett introduced land use legislation on behalf of Washington County, Utah. The legislation was not passed in 2007. It has since been updated and reintroduced. The legislation would designate the Virgin River and all its Tributaries in Zion National Park as a Wild and Scenic River. The river segment on forest lands is upstream from Zion and represents one of these tributaries. There appears to be some public support for designation by virtue of this proposed legislation. Additionally, the recently completed Kanab Field Office RMP found several additional segments upstream of the park within the Virgin River system to be suitable.

When representatives of the Forest met with staff from the Navajo Nation and Hopi Nation in July 2006, the Tribes indicated that they favored "preservation" of forest resources including Wild and Scenic Rivers. No official communications from the Tribes confirming this support have been received.

During the scoping and DEIS comment periods, the forest received many comments on North Fork Virgin River. Many people expressed interest in seeing this river segment designated. It was part of a group of rivers suggested for a positive suitability finding by a group of conservation organizations. All of the three organized campaigns supported a positive suitability finding for this segment. The Kane County Commission, Kane County Water Conservancy District, Kane County Resource Development Committee, and other oppose the suitability of this segment. Iron County and Garfield County, which are very close to this segment, are also opposed to this segment.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Downstream segments of the river have been found suitable on land managed by the National Park Service, and Bureau of Land Management.

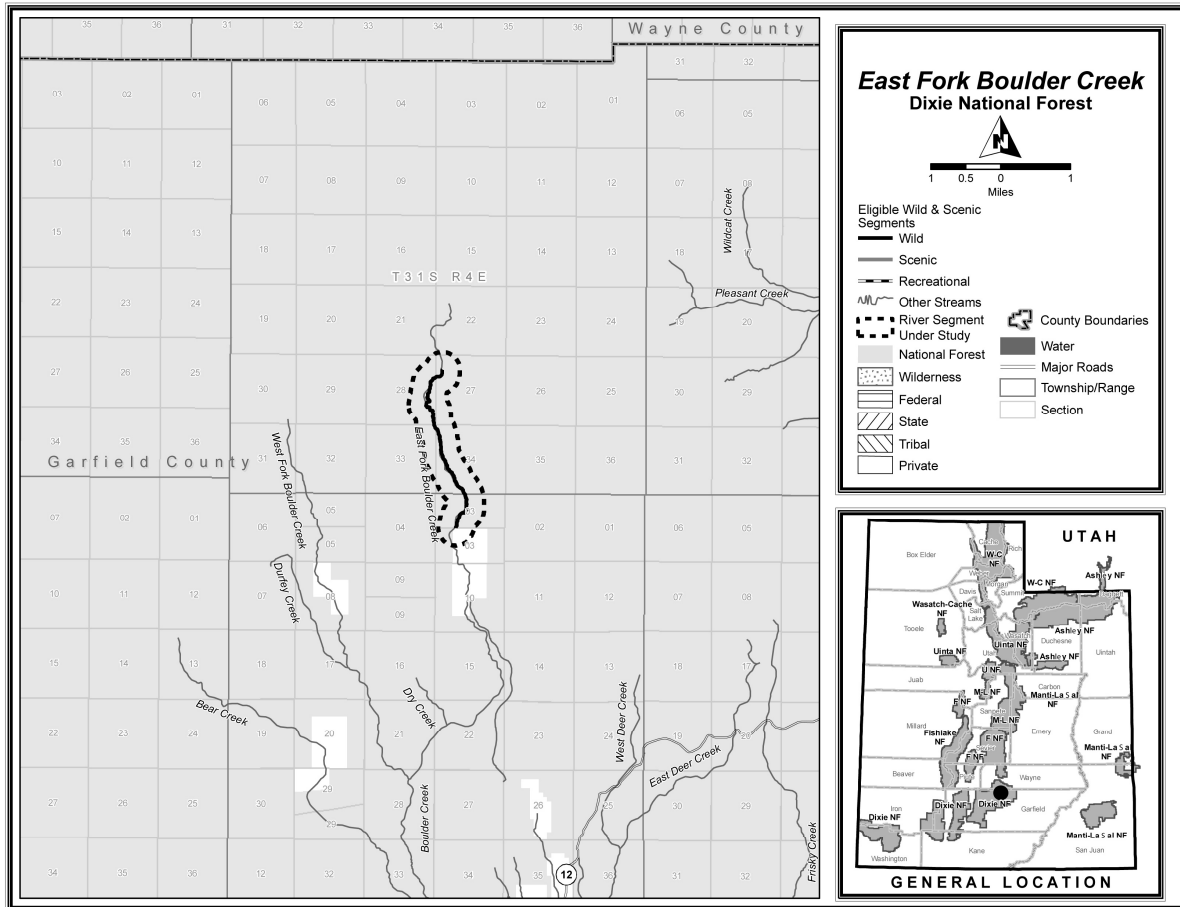
(5) Contribution to river system or basin integrity.

North Fork Virgin River is one of many tributaries to the Virgin River system that are located on Dixie National Forest lands. It crosses a long distance of private land before it reenters public domain. Without coordination across the private land this segment alone does not likely contribute significantly to the integrity of the Virgin River system.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

There are several homeowners associations and civic groups in the area that may have an interest in volunteer projects; however, there has not been any official written or verbal indication of interest from these potential partners.

East Fork Boulder Creek Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: East Fork Boulder Creek

River Mileage:

Studied: 2.8 miles, from headwaters to private property

Eligible: Same

Location:

East Fork Boulder Creek	Dixie National Forest, Escalante Ranger District, Garfield County, Utah		Congressional District 2	
	Start	End	Classification	Miles
Segment 1	NW ¼ NW ¼ Sect. 27, T 31 S, R 4E, SLM	SE ¼ NW ¼ Sect. 3, T 32S, R 4E, SLM	Wild	2.8

Physical Description of River:

The East Fork of Boulder Creek originates along the southern rim of the Aquarius Plateau known as the Boulder Top. The upper reaches of the river are dominated by wet marshy meadows highlighted by a band of aspen trees that spill off the edge of the plateau. Downstream of the plateau, the creek is a boulder dominated step-pool system through a mixed conifer forest that boasts large Engelmann Spruce and Douglas fir trees. The stream corridor supports a diverse riparian plant community and wildlife

community that includes mule deer, black bear, and large herds of Rocky Mountain elk.

ELIGIBILITY

Name and Date of Eligibility Document: Appendix 4, Wild and Scenic River Eligibility, Grand Staircase National Monument (GSENM), 1998

Determination of Free-flow: There are no known diversions, impoundments, or other channel modifications of East Fork Boulder Creek on this segment.

Summary of Outstandingly Remarkable Values (ORV):

Scenic – The East Fork of Boulder Creek is located at the base of the ledge dominated face of the Aquarius Plateau known as the Boulder Top. The upper reaches of the creek are dominated by wet marshy meadows speckled with small beaver ponds, highlighted with a band of aspen trees. The lower reaches of the creek are located in a mixed conifer forest that boasts large Engelmann Spruce and Douglas-fir trees. The scenic qualities of the creek corridor are frequently enhanced by the presence of mule deer, black bear, and large herds of Rocky Mountain elk.

Recreational – The East Boulder Creek Trail (#34019) provides a backcountry hiking experience and creek access as it loops the river corridor. The trail receives low to moderate amounts of use during the summer and fall months. The creek is regionally known as a highly productive Colorado River cutthroat trout and brook trout fishery. The predominant recreational uses in this area are hiking, recreational fishing and hunting.

Fish – The East Fork of Boulder Creek supports a self-sustaining trout fishery with Colorado River cutthroat trout and brook trout present. The upper half mile reach of the creek is inhabited exclusively by native Colorado River cutthroat trout. Natural cascades prevent upstream movement of non-native brook trout into this upper stream segment. The Colorado River cutthroat trout within the stream are a remnant population and a genetically pure population.

CLASSIFICATION

Basis for the Classification of River: Wild

There are no roads present in the river corridor. There is access to the river corridor via a non-motorized trail.

SUITABILITY REPORT

Landownership and Land Uses – The eligible river corridor is a 2.8 mile-long river segment and encompasses 895 acres and is entirely on National Forest System (NFS) lands administered by the Dixie National Forest.

River Mile	Ownership	Acres
0 – 2.8	Dixie National Forest (Escalante Ranger District)	895
Total:		895 acres

Mineral and Energy Resource Activities – There are no existing salable, locatable, or leasable mineral and energy resources development in the eligible segment.

East Fork Boulder Creek is located in the Boulder Mountain/Boulder Top/Deer Lake Roadless Area. According to the Dixie National Forest Roadless Area Minerals Evaluation the potential for this area was as follows:

Mineral Potential:

Oil and Gas: Currently there are no producing wells or fields in this area. It has been only lightly explored. There are no leases but industry has expressed interest in the areas to the east and south.

Oil potential associated with four possible plays (Late Proterozoic/Cambrian, Devonian-Pennsylvanian, Late Paleozoic, and Permo-Triassic Unconformity) is ranked as moderate to high (low certainty) along the eastern and southern portions of the Teasdale and Escalante Ranger Districts. The occurrence potential is lower in this roadless area due to the occurrence of volcanic activity and occurrence of carbon dioxide gas. Development potential is ranked as low by the UGS due to the volcanic rocks, occurrence of carbon dioxide, and lack of defined targets. If leases are issued, exploratory drilling on a limited basis could occur.

This area is not prospective for natural gas/methane due to uplift and erosion of known source/reservoir Cretaceous sedimentary rocks.

Carbon Dioxide: Moderate potential for occurrence (low certainty). Development potential is low-none because there is no market.

Geothermal: Occurrence potential is unknown due to the lack of identified thermal wells and springs. Due to the lack of known geothermal springs and wells and overall information, the development potential is considered low.

Coal: There are no known coal deposits in this area

Locatable Minerals: There are no known valuable deposits of base or precious metals or other locatable minerals. Development potential is low.

Common Variety: Tertiary volcanic rocks cover nearly the entire area. Volcanic rock could be developed for riprap, decorative stone, and building stone. Development potential is considered moderate, most likely on a small scale, localized basis.

References:

Utah Geological Survey, 2004, The Oil, Gas, Coalbed Gas, Carbon Dioxide and Geothermal Resources of the Fishlake National Forest, Southwestern Utah, April 30, 2004.

Doelling, H.H., 1972. Southwestern Utah Coal Fields: Alton, Kaiparowits Plateau and Kolob-Harmony. Utah Geological and Mineralogical Survey, Monograph Series No. 1, 1972.

Water Resources Development – The area of study is the section of stream beginning at the Escalante Ranger District northern boundary in NW/NW Section 27, T. 31 S, R. 4 E and ending at the private property boundary in SE/NW Section 3, T. 32 S, R. 4 E. There are no known existing water developments (dams, diversions or channel modifications) on this segment. There are no historic, current, or known planned Federal Energy Regulatory Commission permits or license applications for this corridor. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – The East Boulder Creek Trail (#34019) provides access to the river's headwaters and loops the river corridor, within the corridor. This non-motorized trail is 6.5 miles long and receives low to moderate use. The trailhead is accessed by Forest Service Road #30165, but neither the trailhead nor the road are in the river corridor. There are no other facilities and/or other developments located in the river corridor.

Grazing Activities – The river segment is located within the Boulder Allotment. The Boulder Allotment consists of 89,568 acres and is an active allotment with eight permittees.

Boulder Allotment		
<u>Permittee Name</u>	<u>Number of mature cow/Nursing</u>	<u>Active Grazing Dates</u>
M.G. Nelson	60	06/16 to 10/15
L.J. & B.C. Gardener	70	06/16 to 10/15
A. & D. Coombs	152	06/16 to 10/15
H.D & G. Lefevre	7	06/16 to 10/15
B.K. & A.H. Roundy	80	06/16 to 10/15
G.T. Roundy	80	06/16 to 10/15
Roundy Land & Cattle Co.	371	06/16 to 10/15
G.W. Haws	223	06/16 to 10/15

Recreation Activities – See recreational ORV discussion above.

Other Resource Activities – Due to the limited access and steep terrain, other river corridor uses, such as timber harvest and farming, are not foreseeable uses.

Special Designations – The East Fork Boulder Creek river corridor is entirely located in the Boulder Mountain/Boulder Top/Deer Lake Roadless Area (1999 Roadless Areas). The purpose of designated roadless areas under the 1999 Road Rule was “to restrict certain activities such as road construction and reconstruction into the unroaded portions of inventoried roadless areas and to establish a process for evaluating possible limitations on activities in other uninventoried unroaded areas through forest planning at the local level.”

Socio-Economic Environment – The river segment is located within Garfield County. Boulder and Escalante are the two closest towns. Access to the area is provided by Highway 12 – an All-American Road.

Garfield County is a largely rural county where traditional natural resource economic endeavors have dominated historically. In recent years, there has been a growth in recreation, tourism, and services. Much of this growth in recreation and tourism can be attributed to the designation of the Grand Staircase-Escalante National Monument in 1996. The county is struggling to retain rural traditions and lifestyles as well as “working” connections with the land. In the face of rising land values and globalization, traditional industries such as farming and ranching are becoming more difficult. Second home ownership has increased in the county dramatically. Over 60% of property tax notices in Garfield County are sent out of the county (39% out of state or country). Educating these occasional land users about special values and proper use is becoming more difficult.

A recent visitor study of the Grand Staircase-Escalante National Monument indicates that approximately 600,000 people visit the area every year. While most of the visitors remain in the frontcountry visitor areas, exploration into the backcountry is increasing. Visitors come from throughout the United States and the world. About 14% of visitors are from Utah, 13% from California, 6% from Arizona, 5% from Colorado, and 10% from other western states. About 30% come from the other 39 states leaving 23% from other countries. The average visitor spends three days in the area. Only 20% of these visitors indicated that the Monument was their primary destination. Many of these visitors end up exploring the forest. The most common visitor activities reported were hiking, photography, scenic driving, and viewing natural features. Escalante and Bryce Canyon are the two most visited communities near the Monument. Boulder also experienced high visitation. The average amount spent by a group of three to

the area was just under \$500. This means that more than \$20.6 million is being directly spent in Garfield and Kane counties because of the designated Monument. This is the equivalent of more than 430 full-time jobs. (A Front Country Visitor Study for the Grand Staircase-Escalante National Monument, Utah State University, Professional Report IORT PR2006-01, April 2006).

More specifically, trends and conditions:

Garfield County, the fifth largest county in the state has the highest percentage of federal land (over 90%) in a county in the state of Utah.⁶ The county contains over one million acres of National Forest System lands (including the Box-Death Hollow Wilderness Area) and large areas of other federal land, including portions of Grand Staircase-Escalante National Monument, Bryce Canyon National Park, Capitol Reef National Park, and Glen Canyon National Recreation Area. There are only about 170,000 acres of private land in the county. Public lands provide both challenges and opportunities for economic development in the county. The county is sparsely populated and is only projected to grow at a 1.0 percent rate annually between 2005 and 2050, a rate below the state average.

According to a 2003 Utah Bureau of Economic Analysis Report, Garfield County residents had one of the five lowest levels of total personal income in the state for 2003. Additionally, Garfield County had the second highest unemployment rate (10.8 percent) in the state according to 2003 Utah Department of Workforce Services information, exceeded only by Emery County's 11.0 percent unemployment rate. Slow job growth and unemployment are recurrent problems for the county. Traditionally, county residents have relied primarily upon ranching and timber. While there is a desire to retain these traditional sources of economic opportunity, services related to recreation and tourism are growing quickly in the county. Services are projected to increase from a 30.1 percent share in the Garfield County economy in 2005 to a 37.8 percent share in 2030 (State of Utah 2003).

According to Garfield County, the growth in the recreation and tourism industries has not been strong enough to provide the economic growth that has been achieved in more diverse parts of the state (Bremner 2006).⁷ While these services (mostly related to leisure and hospitality) represent the largest sector in the Garfield County economy, government jobs (the sector ranked second) make up a much higher percentage of payroll wages (State of Utah 2003). There is a perception that leisure and hospitality jobs will not pay as much as jobs in other more traditional sectors.⁸ According to Garfield County, "... Garfield County is struggling economically. Schools are showing declining enrollment, and additional natural resource based industries have been all but eliminated in the county. ... Garfield County is struggling and unless changes [in land management and opportunities] are made relatively soon, things will get tougher" (Bremner 2006). Also according to Garfield County Commissioner Maloy Dodds in testimony to Congress, "...most tourist-generated jobs generally are minimal skill, minimum wage jobs – not the kind that can support a family." Another important fact that the Commissioner noted, "Federal destination areas [are] a mixed blessing at best" for Garfield County because increased visitors can be a burden to the county in terms of increased cost of garbage and search and rescue operations (Testimony to

⁸ In the book *Visions of the Grand Staircase-Escalante* (compiled at the time of the Grand Staircase-Escalante National Monument planning process in the 1990s), Gail Blattenberger and David Kiefer acknowledge, "[m]inimum wages plus tips at Ruby's Inn are what the locals [in Garfield County] envisage from the service industry, but high tech service enterprises are also viable given an investment in communications infrastructure." Blattenberger and Kiefer suggest that while based on past performance "economic well-being" is clearly an issue in Kane and Garfield counties, "[e]xtractive industries are not an optimal or even a viable solution to the economic situation in these counties." Furthermore, "change will certainly come to these economies" and be met with "resistance (because of) the desire for a land-based economy (which is) seen as crucial to the quality of life in the rural West." According to the authors, the key is to "find ways of preserving our land-based Western heritage and lifestyle (which are so important to rural residents) along with the natural treasures of the countryside." Roughly 10 years later, we seem to face the same conditions, trends, attitudes, fears, opportunities, and challenges (Blattenberger and Kiefer 1998).

House Resources Committee's Forest and Forest Health Subcommittee, June 15, 2005).

The closest communities to the river segment are Escalante and Boulder. Escalante is projected to grow from about 800 people in 2000 to about 1300 in 2050. Boulder is projected to grow from 180 in 2000 to around 300 in 2050.

The river segment and the areas below Highway 12 are also used regularly by residents of Wayne County. Wayne County has the second highest percentage of federal land of any county in the state. The county contains about 160,000 acres of National Forest System lands. The county contains the second fewest acres of private land in the state, trailing only Daggett County (which is four times smaller than Wayne County) by about 8,000 acres. From 2004 to 2005, Wayne County was only one of three counties to register negative population growth. The county had a -0.6% growth rate (the lowest in the State) (State of Utah 2006). However, from 2005 to 2050, the county is projected to almost double in population and grows at a 1.2 percent annual growth rate (State of Utah 2005).

Education and health services are the largest sector in the Wayne County economy. This sector is buoyed by the presence of Aspen Health Services' Aspen Achievement Academy, a wilderness therapy program that is a major county employer. Headquartered in Loa, the program operates on BLM and Forest Service lands. Government is the second largest sector in the county. Since 1980 agriculture has decreased dramatically and services have increased, a trend that is projected to continue into 2030. In 1980, agriculture made up 26.9 percent of the economy, while services took only a 3.5 percent share. By 2002, agriculture had declined to 13.8 percent and services had increased to 24.9 percent. In 2030, *People and the Forests* projects that agriculture will take a 6.5 percent share, while services will have increased to 30.3 percent (State of Utah 2003). This increase is visible in the increasingly popular tourist venue of Torrey at the gateway to Capitol Reef National Park.

While agriculture continues to decline, it is an important part of the county's traditions and customs. Many county residents work multiple jobs to keep the traditions of the past alive. The Wayne County General Plan identifies tourism promotion as an important economic development tool; however, there is concern over preserving quality of life while implementing this strategy.

Wayne County continues to struggle with issues of poverty. The county's 1999 poverty rate exceeded 15 percent, almost one and one-half times the state average (State of Utah 2003). Total personal income in Wayne County is the fourth lowest in the state. Growth rates of total personal income were second to last in the state from 2000 to 2003 (Bureau of Economic Analysis 2003).

Teasdale, Grover, and Torrey are the closest towns in Wayne County to the river segment. Torrey, population 171 (2005), is not expected to grow dramatically in the next 50 years. Other communities in Wayne County (e.g., Teasdale and Grover) are not expected to grow rapidly.

Current Administration and Funding Needs if Designated – The current administering agency is the USFS.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

Not applicable; all lands adjacent to river segment are managed by the Forest Service.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Not applicable; all lands adjacent to river segment are managed by the Forest Service.

(3) Support or opposition to designation. Garfield County is working on a Resource Management Plan for all lands in the county. They have included an analysis of Wild and Scenic Rivers in their discussions. While their RMP supports the designation of Cataract Canyon (Colorado River) and the Dirty Devil River as Wild and Scenic Rivers, the county does not support the designation of East Fork Boulder Creek.

During the Dixie and Fishlake National Forests eligibility process, the county expressed repeated concern over the eligibility determinations made for this and other river segments on the Escalante Ranger District. The county does not believe that the Escalante River system is suitable because its flow is too regulated by irrigators.

When representatives of the Forest met with staff from the Navajo Nation and Hopi Nation in July 2006, the Tribes indicated that they favored "preservation" of forest resources including Wild and Scenic Rivers. No official communication from the Tribes confirming this support has been received.

During the scoping and DEIS comment periods, the forest received many comments on East Fork of Boulder Creek. Many local residents of Boulder Town and others have expressed an interest in this river segment being found suitable. However, Garfield County and others have expressed strong opposition to this segment due to concerns over competing water uses and values. None of the three organized campaigns supported a positive suitability finding for this segment.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Downstream from the Forest Service boundary, GSENM found East Fork Boulder Creek to be suitable for designation (Appendix 11, GSENM FEIS Monument Plan).

The Dixie National Forest, Glen Canyon National Recreation Area, Bryce Canyon National Park, and GSENM all worked together on eligibility for this river segment. Final determinations of suitability were reserved for individual agencies to make on their own.

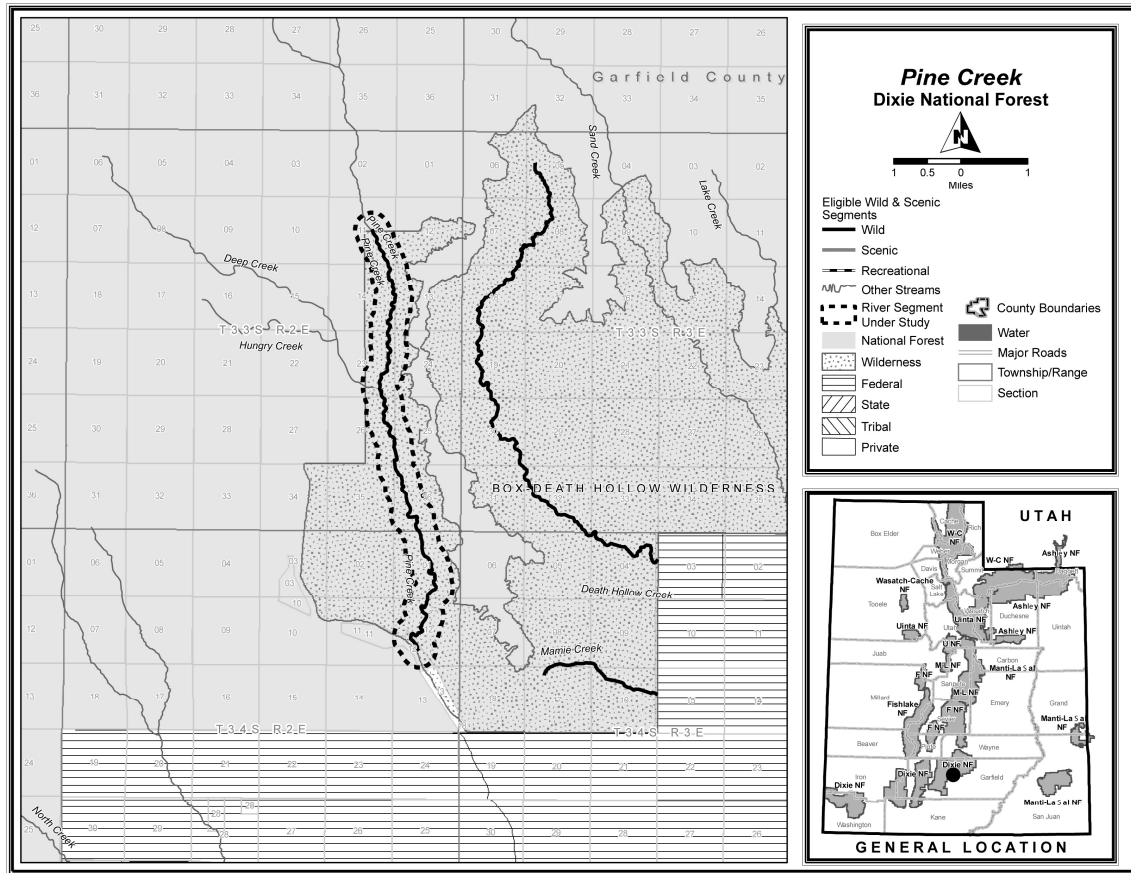
(5) Contribution to river system or basin integrity.

East Fork Boulder Creek is one of the tributaries identified in the GSENM plan that contributes significantly to the flow of the Escalante River. As a perennial stream it provides flow consistently to the system.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

No commitment has been expressed.

Pine Creek Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Pine Creek

River Mileage:

Studied: 7.8 miles, from north wilderness boundary to south wilderness boundary

Eligible: Same

Location:

Pine Creek	Dixie National Forest, Escalante Ranger District, Garfield County, Utah		Congressional District 2	
	Start	End	Classification	Miles
Segment 1	SW ¼ NE ¼ Sect. 11, T 33S, R 2E, SLM	SE ¼ SW ¼ Sect. 12, T 33S, R 2E, SLM	Wild	7.8

Physical Description of River: Pine Creek is a small, fast running creek that flows down a narrow tree lined canyon in the Box-Death Hollow Wilderness know as “The box”. The creek is predominantly a step-pool system that carves its way through the Escalante Monocline and into Navajo Sandstone. The upper reaches of the creek are particularly scenic with steep cliffs ranging from 800 to 1200 feet tall that descend to the creek’s edge which is vegetated with large spruce and ponderosa pine trees. The creek and riparian corridor are home to a diverse community of fish and wildlife, including Colorado cutthroat, brown trout , black bear, mule deer, owls, and various canyon dwelling birds.

ELIGIBILITY

Name and Date of Eligibility Document: Appendix 4, Wild and Scenic River Eligibility, Grand Staircase National Monument (GSENM), 1998

Determination of Free-flow: There are no known diversions, impoundments, or other channel modifications of Pine Creek on National Forest System lands.

Summary of Outstandingly Remarkable Values (ORV):

Scenic – Pine Creek is a small, fast running creek that flows down a narrow tree lined canyon in the Box-Death Hollow Wilderness know as “The box”. The creek is predominantly a step-pool system that carves its way through the Escalante Monocline and into Navajo Sandstone. The upper reaches of the creek are particularly scenic with steep cliffs ranging from 800 to 1200 feet tall that descend to the creek’s edge which is vegetated with large spruce and ponderosa pine trees. The lower reaches transition into sandy benches thick with willows and ponderosa pines, but maintain the spectacular cliff walls.

Recreational – The Box Trail (#43009) provides river-side hiking access the entire length of the creek as it carves its way down through the Box-Death Hollow Wilderness area. The trail is approximately 7.8 miles, begins and ends on the “Hells Backbone Road” (FS Road #30153) and usually takes an entire day to hike. Although the trail is rough and requires hikers to wade through the river and navigate the slot canyon, the trail receives an average of 2 to 3 hikers per day during the summer months.

Geological – Pine Creek is part of the Escalante River System which is noted for colorful canyon walls composed of layers of limestone, siltstone and sandstone. The geologic record contained in these layers speaks volumes about past history of the area. Weathering and erosion have created a variety of unique features within the canyon.

Ecological – Pine Creek supports a self-sustaining trout fishery that is dominated by brown trout, with native Colorado River cutthroat trout also present.

CLASSIFICATION

Basis for the Classification of River: Wild

There are no roads present in the river corridor. There is access to the river via a non-motorized hiking trail. The river corridor is located entirely in the Box-Death Hollow Wilderness area.

SUITABILITY REPORT

Landownership and Land Uses – The eligible river corridor is a 7.8 mile-long river segment and encompasses about 2234 acres, and is entirely on National Forest System (NFS) lands in the Box-Death Hollow Wilderness that is administered by the Dixie National Forest.

River Mile	Ownership	Acres
0 – 7.8	Dixie National Forest (Escalante Ranger District)	2234
	Total:	2234

Mineral and Energy Resource Activities – There is one authorized oil and gas lease within the river corridor. The lease was filed on 08/06/1976 for C02 mining in the west half of section 13. Currently there is no activity for associated with this lease. The development associated with this lease consists of a well located on Antone’s Bench, outside of the Box-Death Hollow Wilderness.

Pine Creek is located in the Box-Death Hollow Roadless Area. According to the Dixie National Forest Roadless Area Minerals Evaluation the potential for this area was as follows:

Mineral Potential:

Oil and Gas: Currently there are no producing oil or natural gas wells or fields in this area. However, Escalante Carbon Dioxide Field (Known Geologic Structure) which contains and has been developed for carbon dioxide gas lies partially within the Box-Death Hollow Wilderness Area and adjacent lands of this roadless area being evaluated. Current leases within the wilderness area that predated wilderness designation have been suspended by BLM, pending further analysis. Wells within the wilderness area are shut-in. No additional leasing can occur with the wilderness because the Utah Wilderness Act of 1983 prohibits additional leasing. The shut-in wells with prior existing rights could be developed. The adjacent areas within this roadless area are available for leasing.

Oil potential associated with four possible plays (Late Proterozoic/Cambrian, Devonian-Pennsylvanian, Late Paleozoic, and Permo-Triassic Unconformity) is ranked as moderate to high (low certainty) along the eastern and southern portions of the Teasdale and Escalante Ranger Districts. This roadless area lies within this prospective area. Petroleum development potential is ranked by the UGS as low-moderate with the highest potential relative to the Devonian-Pennsylvanian and Permo-Triassic Plays. However, this area probably has lower potential due to the volcanic activity to the north and carbon dioxide gas occurrence. Natural gas occurrence and development potential is low-none.

Carbon Dioxide: The Escalante Carbon Dioxide Known Geologic Structure lies within this area as described above. Several expressions of interest for leasing and pre-sale offers have been made in this area for additional leasing, which are currently pending. If leases are issued, additional exploratory drilling and development could occur, however there is no market for carbon dioxide within a reasonable distance of the field and there are no pipelines in the general area to connect to for transport to existing market areas. Carbon dioxide occurrence potential is high but development potential is ranked as low-moderate due to the lack of a market.

Geothermal: Occurrence potential is unknown due to the lack of identified thermal wells and springs. Due to the lack of information, the development potential is considered low.

Coal: There are known mineable coal deposits in this area.

Locatable Minerals: There are no known valuable deposits of base or precious metals or other locatable minerals. Development potential is low.

Common Variety: There are known deposits of sandstones and colluvium derived from volcanic rocks to the north. There is potential for the development of sandstone and rounded colluvium for decorative or building stone, and riprap.

References:

Utah Geological Survey, 2004, The Oil, Gas, Coalbed Gas, Carbon Dioxide and Geothermal Resources of the Fishlake National Forest, Southwestern Utah, April 30, 2004.

Doelling, H.H., 1972. Southwestern Utah Coal Fields: Alton, Kaiparowits Plateau and Kolob-Harmony. Utah Geological and Mineralogical Survey, Monograph Series No. 1, 1972.

Water Resources Development – The area of study is the stream section of Pine Creek located within the Box Death Hollow Wilderness. The section begins in the SE1/4 of Section 11, T33S, R2E and ends at the Forest/Wilderness boundary in the NW1/4 of section 13, T34S, R2E. This is also the northern boundary of a strip of private land extending to the Forest boundary. There are no historic, current, or known planned Federal Energy Regulatory Commission permits or license applications for this corridor. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – The Box Trail (#34009) provides access to the river and is located in the river corridor. This non-motorized trail is 7.8 miles long and receives low to moderate use. The trail is a low-level class 2 trail.

There are no roads within the river corridor.

There is a cattle fence at both the top and bottom of the river that exist within the river corridor.
There are no other facilities and/or other developments located in the river corridor.

Grazing Activities – The river segment is located within the Pine Creek Allotment. The Pine Creek Allotment consists of 49,660 acres and is an active allotment with one permittee. Although the river corridor is within the allotment, there is no grazing within the Box-Death Hollow Wilderness and therefore no grazing on the riverbanks.

Oak Creek Allotment		
<u>Permittee Name</u>	<u>Number of mature cow/Nursing</u>	<u>Active Grazing Dates</u>
S.D.Sorensen	254	06/01 to 09/30

Recreation Activities – Recreational use of Pine Creek is considered low to moderate. The Box Trail (#43009) provides river-side hiking access the entire length of the river as it carves its way down through the Box-Death Hollow Wilderness area. The trail is approximately 7.8 miles, begins and ends on the “Hells Backbone Road” (FS Road #30153) and usually takes an entire day to hike. Although the trail is rough and requires hikers to wade through the river, the trail receives an average of 2 to 3 hikers per day during the summer months. The steep winding canyon provides solitude and a primitive experience.

Other Resource Activities – Due to the limited access, steep terrain, and designated wilderness status other river corridor uses, such as timber harvest and farming, are not foreseeable uses.

Special Designations – The Pine Creek river corridor is entirely located in the Box-Death Hollow Roadless Area (1999 Roadless Areas). The purpose of designated roadless areas under the 1999 Road Rule was “to restrict certain activities such as road construction and reconstruction into the unroaded portions of inventoried roadless areas and to establish a process for evaluating possible limitations on activities in other uninventoried unroaded areas through forest planning at the local level.”

The river corridor is also entirely located within the Box-Death Hollow Wilderness area. This area was designated in 1984 under the Utah Wilderness Act. The purpose of the wilderness designation was to ensure this area was free from modern human control or manipulation, was undeveloped and natural, and provides outstanding opportunities for solitude and a primitive and unconfined type of recreation.

Socio-Economic Environment – The river segment is located within Garfield County. Boulder and Escalante are the two closest towns. Access to the area is provided by Highway 12 – an All-American Road. Cottonwood Canyon flows from the Dixie National Forest onto the Grand Staircase-Escalante National Monument.

Garfield County is a largely rural county where traditional natural resource economic endeavors have dominated historically. In recent years, there has been a growth in recreation, tourism, and services. Much of this growth in recreation and tourism can be attributed to the designation of the Grand Staircase-Escalante National Monument in 1996. The county is struggling to retain rural traditions and lifestyles as well as “working” connections with the land. In the face of rising land values and globalization, traditional industries such as farming and ranching are becoming more difficult. Second home ownership has increased in the county dramatically. Over 60% of property tax notices in Garfield County are sent out of the county (39% out of state or country). Educating these occasional land users about special values and proper use is becoming more difficult.

A recent visitor study of the Grand Staircase-Escalante National Monument indicates that approximately 600,000 people visit the area every year. While most of the visitors remain in the Front Country visitor areas, exploration into the backcountry is increasing. Visitors come from throughout the United States

and the world. About 14% of visitors are from Utah, 13% from California, 6% from Arizona, 5% from Colorado, and 10% from other western states. About 30% come from the other 39 states leaving 23% from other countries. The average visitor spends three days in the area. Only 20% of these visitors indicated that the Monument was their primary destination. Many of these visitors end up exploring the forest. The most common visitor activities reported were hiking, photography, scenic driving, and viewing natural features. Escalante and Bryce Canyon are the two most visited communities near the Monument. Boulder also experienced high visitation. The average amount spent by a group of three to the area was just under \$500. This means that more than \$20.6 million is being directly spent in Garfield and Kane counties because of the designated Monument. This is the equivalent of more than 430 full-time jobs. (A Front Country Visitor Study for the Grand Staircase-Escalante National Monument, Utah State University, Professional Report IORT PR2006-01, April 2006).

More specifically, trends and conditions:

Garfield County, the fifth largest county in the state has the highest percentage of federal land (over 90%) in a county in the state of Utah.⁹ The county contains over one million acres of National Forest System lands (including the Box-Death Hollow Wilderness Area) and large areas of other federal land, including portions of Grand Staircase-Escalante National Monument, Bryce Canyon National Park, Capitol Reef National Park, and Glen Canyon National Recreation Area. There are only about 170,000 acres of private land in the county. Public lands provide both challenges and opportunities for economic development in the county. The county is sparsely populated and is only projected to grow at a 1.0 percent rate annually between 2005 and 2050, a rate below the state average.

According to a 2003 Utah Bureau of Economic Analysis Report, Garfield County residents had one of the five lowest levels of total personal income in the state for 2003. Additionally, Garfield County had the second highest unemployment rate (10.8 percent) in the state according to 2003 Utah Department of Workforce Services information, exceeded only by Emery County's 11.0 percent unemployment rate. Slow job growth and unemployment are recurrent problems for the county. Traditionally, county residents have relied primarily upon ranching and timber. While there is a desire to retain these traditional sources of economic opportunity, services related to recreation and tourism are growing quickly in the county. Services are projected to increase from a 30.1 percent share in the Garfield County economy in 2005 to a 37.8 percent share in 2030 (State of Utah 2003).

According to Garfield County, the growth in the recreation and tourism industries has not been strong enough to provide the economic growth that has been achieved in more diverse parts of the state (Bremner 2006).¹⁰ While these services (mostly related to leisure and hospitality) represent the largest sector in the Garfield County economy, government jobs (the sector ranked second) make up a much higher percentage of payroll wages (State of Utah 2003). There is a perception that leisure and hospitality jobs will not pay as much as jobs in other more traditional sectors.¹¹ According to Garfield County, "... Garfield County is struggling economically. Schools are showing declining enrollment and additional natural resource based industries have been all but eliminated in the county. ... Garfield County is struggling and unless changes [in land management and opportunities] are made relatively soon, things

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will get tougher” (Bremner 2006). Also according to Garfield County Commissioner Maloy Dodds in testimony to Congress, “...most tourist-generated jobs generally are minimal skill, minimum wage jobs – not the kind that can support a family.” Another important fact that the Commissioner noted, “Federal destination areas [are] a mixed blessing at best” for Garfield County because increased visitors can be a burden to the county in terms of increased cost of garbage and search and rescue operations (Testimony to House Resources Committee’s Forest and Forest Health Subcommittee, June 15, 2005).

The closest communities to the river segment are Escalante and Boulder. Escalante is projected to grow from about 800 people in 2000 to about 1300 in 2050. Boulder is projected to grow from 180 in 2000 to around 300 in 2050.

The river segment and the areas below Highway 12 are also used regularly by residents of Wayne County. Wayne County has the second highest percentage of federal land of any county in the state. The county contains about 160,000 acres of National Forest System lands. The county contains the second fewest acres of private land in the state, trailing only Daggett County (which is four times smaller than Wayne County) by about 8,000 acres. From 2004 to 2005, Wayne County was only one of three counties to register negative population growth. The county had a -0.6% growth rate (the lowest in the State) (State of Utah 2006). However, from 2005 to 2050, the county is projected to almost double in population and growth at a 1.2 percent annual growth rate (State of Utah 2005).

Education and health services are the largest sector in the Wayne County economy. This sector is buoyed by the presence of Aspen Health Services’ Aspen Achievement Academy, a wilderness therapy program that is a major county employer. Headquartered in Loa, the program operates on BLM and Forest Service lands. Government is the second largest sector in the county. Since 1980 agriculture has decreased dramatically and services have increased, a trend that is projected to continue into 2030. In 1980, agriculture made up 26.9 percent of the economy, while services took only a 3.5 percent share. By 2002, agriculture had declined to 13.8 percent and services had increased to 24.9 percent. In 2030, *People and the Forests* projects that agriculture will take a 6.5 percent share, while services will have increased to 30.3 percent (State of Utah 2003). This increase is visible in the increasingly popular tourist venue of Torrey at the gateway to Capitol Reef National Park.

While agriculture continues to decline, it is an important part of the county’s traditions and customs. Many county residents work multiple jobs to keep the traditions of the past alive. The Wayne County General Plan identifies tourism promotion as an important economic development tool; however, there is concern over preserving quality of life while implementing this strategy.

Wayne County continues to struggle with issues of poverty. The county’s 1999 poverty rate exceeded 15 percent, almost one and one-half times the state average (State of Utah 2003). Total personal income in Wayne County is the fourth lowest in the state. Growth rates of total personal income were second to last in the state from 2000 to 2003 (Bureau of Economic Analysis 2003).

Teasdale, Grover, and Torrey are the closest towns in Wayne County to the river segment. Torrey, population 171 (2005), is not expect to grow dramatically in the next 50 years. Other communities in Wayne County (e.g., Teasdale and Grover) are not expected to grow rapidly.

Current Administration and Funding Needs if Designated – The current administering agency is the USFS. The U.S. Forest Service and BLM would share management of the segment.

The following information is based on 2001 data, which doesn’t account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using

an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

Not applicable as the segment is entirely on land managed by the Forest Service.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Not applicable as the segment is entirely on land managed by the Forest Service.

(3) Support or opposition to designation.

Garfield County is working on a Resource Management Plan for all lands in the county. They have included an analysis of Wild and Scenic Rivers in their discussions. While their RMP supports the designation of Cataract Canyon (Colorado River) and the Dirty Devil River as Wild and Scenic Rivers, the county does not support the designation of Pine Creek.

During the Dixie and Fishlake National Forests eligibility process, the county expressed repeated concern over the eligibility determinations made for this and other river segments on the Escalante Ranger District. The county does not believe that the Escalante River system is suitable because its flow is too regulated by irrigators.

When representatives of the Forest met with staff from the Navajo Nation and Hopi Nation in July 2006, the Tribes indicated that they favored "preservation" of forest resources including Wild and Scenic Rivers. No official communications from the Tribes confirming this support have been received.

During the scoping and DEIS comment periods, the forest received comments on Pine Creek. Some people expressed interest in seeing this river segment designated. Garfield County is opposed to designation. Opposition doesn't appear to be as strong given that the segment is already protected by Wilderness designation. Many have questioned whether the additional protections available under wild and scenic rivers designation are necessary to protect the river segment. None of the three organized campaigns supported a positive suitability finding for this segment.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Downstream from the Forest Service boundary, GSENM found the Escalante River from its confluence with Pine Creek to be suitable for designation (Appendix 11, GSENM FEIS Monument Plan).

The Dixie National Forest, Glen Canyon National Recreation Area, Bryce Canyon National Park, and GSENM all worked together on eligibility for this river segment. Final determinations of suitability were reserved for individual agencies to make on their own.

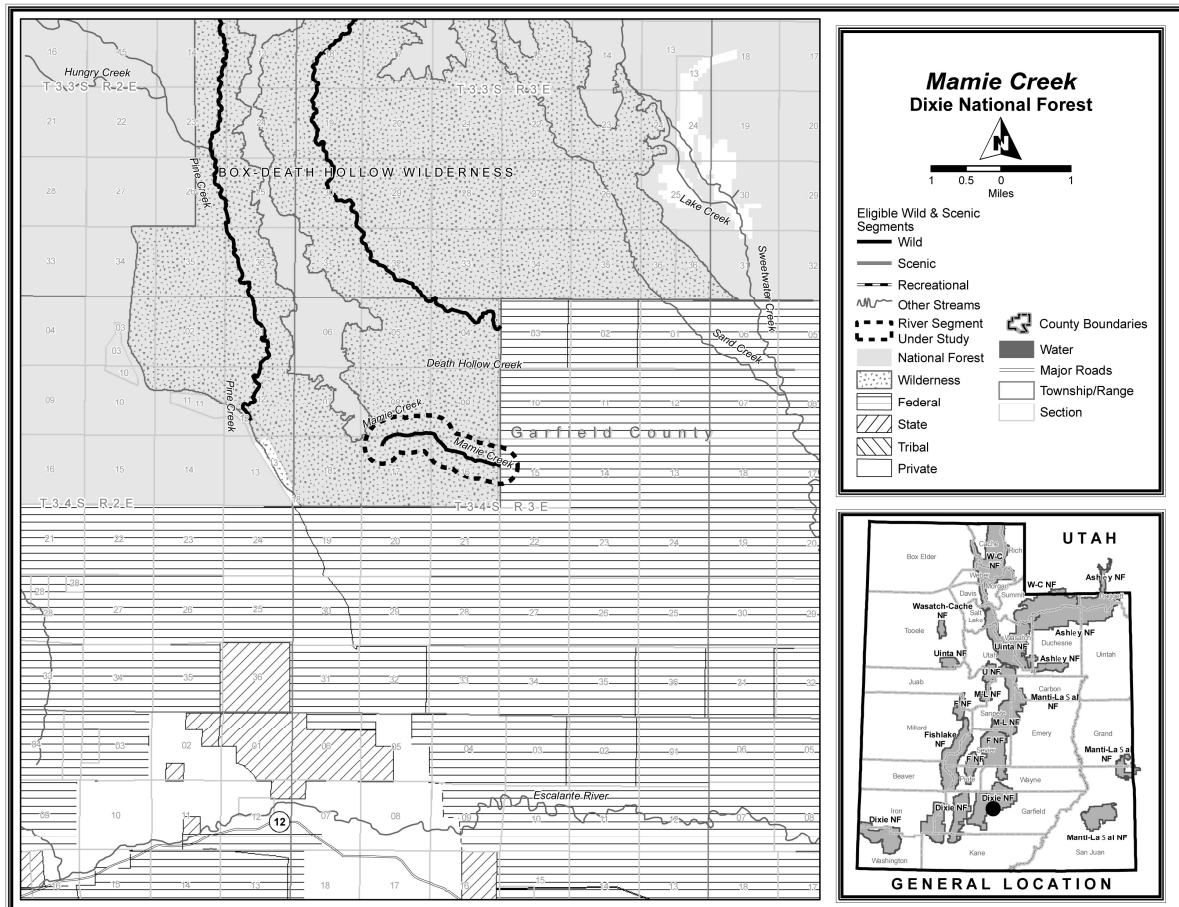
(5) Contribution to river system or basin integrity.

Pine Creek is one of the tributaries identified in the GSENM plan that contributes significantly to the flow of the Escalante River. As a perennial stream it provides flow consistently to the system.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

No commitment has been expressed.

Mamie Creek Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Mamie Creek

River Mileage:

Studied: 11.2 miles, from headwaters to Escalante River

Eligible: 2.0 miles, from the headwaters to the forest boundary (Box-Death Hollow Wilderness Boundary)

Location:

Mamie Creek	Dixie National Forest, Escalante Ranger District, Garfield County, Utah		Congressional District 2	
	Start	End	Classification	Miles
Segment 1	SE ¼ NW ¼ Sect. 17, T 34S, R 3E, SLM	NE ¼ NE ¼ Sect. 16, T 34S, R 3E, SLM	Wild	2.0

Physical Description of River: Mamie Creek is a small creek that runs through a scenic canyon in the Box-Death Hollow Wilderness. Mamie Creek is located in open ponderous pine stand with a Manzanita understory. The river typically is ephemeral with flows typically occurring December through May, and following localized late summer thunderstorms. The river flows through the Escalante Monocline and into Navajo Sandstone where the canyon narrows into a slot canyon and slickrock as it leaves the forest.

ELIGIBILITY

Name and Date of Eligibility Document: Appendix 4, Wild and Scenic River Eligibility, Grand Staircase National Monument (GSENM), 1998

Determination of Free-flow: There are no known diversions, impoundments, or other channel modifications of Mamie Creek on National Forest System lands.

Summary of Outstandingly Remarkable Values (ORVs):

Scenic – Mamie Creek provides unique scenic views as it carves through the Navajo Sandstone. A geological mixture of shapes, textures, and colors that are complimented by waterfalls and scenic pools creates the unique scenic value.

Recreational – There are no Forest Service system trails that access the river, but the river itself is used as a route to access the river as it carves its way down through the Box-Death Hollow Wilderness area. The route receives very low use and is primarily use by hikers hiking up from Death Hollow while attempting to travel the brutal 3 to 4 day trip to the Escalante River. This route requires swimming, rock climbing, and advanced navigation skills. The lower half of the drainage is managed by the Grand Staircase-Escalante National Monument.

Geological, Ecological, Fish, Wildlife, Cultural, Historic – During the interagency process (between the Dixie National Forest, Grand Staircase-Escalante N.M., and Glen Canyon NRA), eligible river segments were identified across agency boundaries. ORVs were determined across the interagency segments. At the beginning of this Forest Service Utah Statewide Suitability project, the Forest Service revalidated the presence of individual ORVs on these river segments. Some ORVs were present on lands administered by other agencies (e.g., downstream on GSENM), but not found on the Forest Service administered segment. The ecological, cultural, wildlife, fish and geological ORVs identified in the interagency report is not found to be regionally significant on the Forest Service portions of the segment

CLASSIFICATION

Basis for the Classification of River: Wild

There are no roads present in the river corridor. There are no Forest Service system trails that access the river. The river corridor is located entirely in the Box-Death Hollow Wilderness area.

SUITABILITY REPORT

Landownership and Land Uses – The eligible river corridor is a 2 mile-long river segment and encompasses about 697 acres, and is entirely on National Forest System (NFS) lands in the Box-Death Hollow Wilderness that is administered by the Dixie National Forest.

River Mile	Ownership
0 – 2	Dixie National Forest (Escalante Ranger District)

Mineral and Energy Resource Activities – There are two suspended authorized oil and gas lease within the river corridor. The leases were filed in 1968 by D. Rowell for C02 mining at T 34S, R 3E, Section 9 and Section 16. Currently there is no activity or development associated with this lease.

Mamie Creek is located in the Box-Death Hollow Roadless Area. According to the Dixie National Forest Roadless Area Minerals Evaluation the potential for this area was as follows:

Mineral Potential:

Oil and Gas: Currently there are no producing oil or natural gas wells or fields in this area. However, Escalante Carbon Dioxide Field (Known Geologic Structure) which contains and has been developed for carbon dioxide gas lies partially within the Box-Death Hollow Wilderness Area and adjacent lands of this roadless area being evaluated. Current leases within the wilderness area that predated wilderness designation have been suspended by BLM, pending further analysis. Wells within the wilderness area are shut-in. No additional leasing can occur with the wilderness because the Utah Wilderness Act of 1983 prohibits additional leasing. The shut-in wells with prior existing rights could be developed. The adjacent areas within this roadless area are available for leasing.

Oil potential associated with four possible plays (Late Proterozoic/Cambrian, Devonian-Pennsylvanian, Late Paleozoic, and Permo-Triassic Unconformity) is ranked as moderate to high (low certainty) along the eastern and southern portions of the Teasdale and Escalante Ranger Districts. This roadless area lies within this prospective area. Petroleum development potential is ranked by the UGS as low-moderate with the highest potential relative to the Devonian-Pennsylvanian and Permo-Triassic Plays. However, this area probably has lower potential due to the volcanic activity to the north and carbon dioxide gas occurrence. Natural gas occurrence and development potential is low-none.

Carbon Dioxide: The Escalante Carbon Dioxide Known Geologic Structure lies within this area as described above. Several expressions of interest for leasing and pre-sale offers have been made in this area for additional leasing, which are currently pending. If leases are issued, additional exploratory drilling and development could occur, however there is no market for carbon dioxide within a reasonable distance of the field and there are no pipelines in the general area to connect to for transport to existing market areas. Carbon dioxide occurrence potential is high but development potential is ranked as low-moderate due to the lack of a market.

Geothermal: Occurrence potential is unknown due to the lack of identified thermal wells and springs. Due to the lack of information, the development potential is considered low.

Coal: There are known mineable coal deposits in this area.

Locatable Minerals: There are no known valuable deposits of base or precious metals or other locatable minerals. Development potential is low.

Common Variety: There are known deposits of sandstones and colluvium derived from volcanic rocks to the north. There is potential for the development of sandstone and rounded colluvium for decorative or building stone, and riprap.

References:

Utah Geological Survey, 2004, The Oil, Gas, Coalbed Gas, Carbon Dioxide and Geothermal Resources of the Fishlake National Forest, Southwestern Utah, April 30, 2004.

Doelling, H.H., 1972. Southwestern Utah Coal Fields: Alton, Kaiparowits Plateau and Kolob-Harmony. Utah Geological and Mineralogical Survey, Monograph Series No. 1, 1972.

Water Resources Development – There are no dams, diversions, or other channel modifications on this segment. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – There are no roads, trails, other facilities and/or other developments located in the river corridor.

Grazing Activities – The river segment is not located within any grazing allotment, therefore there is no grazing activities or development related to grazing.

Recreation Activities – There are no Forest Service system trails that access the river and most of the recreational use of the river corridor is from hikers traveling up the river from where it joins Death Hollow Creek. The area is very remote and access is difficult.

Other Resource Activities – Due to the limited access, steep terrain, and designated wilderness status other river corridor uses, such as timber harvest and farming, are not foreseeable uses.

Special Designations – The Mamie Creek river corridor is entirely located in the Box-Death Hollow Roadless Area (1999 Roadless Areas). The purpose of designated roadless areas under the 1999 Road Rule was “to restrict certain activities such as road construction and reconstruction into the unroaded portions of inventoried roadless areas and to establish a process for evaluating possible limitations on activities in other uninventoried unroaded areas through forest planning at the local level.”

The river corridor is also entirely located within the Box-Death Hollow Wilderness area. This area was designated in 1984 under the Utah Wilderness Act. The purpose of the wilderness designation was to ensure this area was free from modern human control or manipulation, was undeveloped and natural, and provides outstanding opportunities for solitude and a primitive and unconfined type of recreation.

Socio-Economic Environment – The river segment is located within Garfield County. Boulder and Escalante are the two closest towns. Access to the area is provided by Highway 12 – an All-American Road.

Garfield County is a largely rural county where traditional natural resource economic endeavors have dominated historically. In recent years, there has been a growth in recreation, tourism, and services. Much of this growth in recreation and tourism can be attributed to the designation of the Grand Staircase-Escalante National Monument in 1996. The county is struggling to retain rural traditions and lifestyles as well as “working” connections with the land. In the face of rising land values and globalization, traditional industries such as farming and ranching are becoming more difficult. Second home ownership has increased in the county dramatically. Over 60% of property tax notices in Garfield County are sent out of the county (39% out of state or country). Educating these occasional land users about special values and proper use is becoming more difficult.

A recent visitor study of the Grand Staircase-Escalante National Monument indicates that approximately 600,000 people visit the area every year. While most of the visitors remain in the Front Country visitor areas, exploration into the backcountry is increasing. Visitors come from throughout the United States and the world. About 14% of visitors are from Utah, 13% from California, 6% from Arizona, 5% from Colorado, and 10% from other western states. About 30% come from the other 39 states leaving 23% from other countries. The average visitor spends three days in the area. Only 20% of these visitors indicated that the Monument was their primary destination. Many of these visitors end up exploring the forest. The most common visitor activities reported were hiking, photography, scenic driving, and viewing natural features. Escalante and Bryce Canyon are the two most visited communities near the Monument. Boulder also experienced high visitation. The average amount spent by a group of three to the area was just under \$500. This means that more than \$20.6 million is being directly spent in Garfield and Kane counties because of the designated Monument. This is the equivalent of more than 430 full-time jobs. (A Front Country Visitor Study for the Grand Staircase-Escalante National Monument, Utah State University, Professional Report IORT PR2006-01, April 2006).

More specifically, trends and conditions:

Garfield County, the fifth largest county in the state has the highest percentage of federal land (over

90%) in a county in the state of Utah.¹² The county contains over one million acres of National Forest System lands (including the Box-Death Hollow Wilderness Area) and large areas of other federal land, including portions of Grand Staircase-Escalante National Monument, Bryce Canyon National Park, Capitol Reef National Park, and Glen Canyon National Recreation Area. There are only about 170,000 acres of private land in the county. Public lands provide both challenges and opportunities for economic development in the county. The county is sparsely populated and is only projected to grow at a 1.0 percent rate annually between 2005 and 2050, a rate below the state average.

According to a 2003 Utah Bureau of Economic Analysis Report, Garfield County residents had one of the five lowest levels of total personal income in the state for 2003. Additionally, Garfield County had the second highest unemployment rate (10.8 percent) in the state according to 2003 Utah Department of Workforce Services information, exceeded only by Emery County's 11.0 percent unemployment rate. Slow job growth and unemployment are recurrent problems for the county. Traditionally, county residents have relied primarily upon ranching and timber. While there is a desire to retain these traditional sources of economic opportunity, services related to recreation and tourism are growing quickly in the county. Services are projected to increase from a 30.1 percent share in the Garfield County economy in 2005 to a 37.8 percent share in 2030 (State of Utah 2003).

According to Garfield County, the growth in the recreation and tourism industries has not been strong enough to provide the economic growth that has been achieved in more diverse parts of the state (Bremner 2006).¹³ While these services (mostly related to leisure and hospitality) represent the largest sector in the Garfield County economy, government jobs (the sector ranked second) make up a much higher percentage of payroll wages (State of Utah 2003). There is a perception that leisure and hospitality jobs will not pay as much as jobs in other more traditional sectors.¹⁴ According to Garfield County, "... Garfield County is struggling economically. Schools are showing declining enrollment, and additional natural resource based industries have been all but eliminated in the county. . . Garfield County is struggling and unless changes [in land management and opportunities] are made relatively soon, things will get tougher" (Bremner 2006). Also according to Garfield County Commissioner Maloy Dodds in testimony to Congress, "...most tourist-generated jobs generally are minimal skill, minimum wage jobs – not the kind that can support a family." Another important fact that the Commissioner noted, "Federal destination areas [are] a mixed blessing at best" for Garfield County because increased visitors can be a burden to the county in terms of increased cost of garbage and search and rescue operations (Testimony to House Resources Committee's Forest and Forest Health Subcommittee, June 15, 2005).

The closest communities to the river segment are Escalante and Boulder. Escalante is projected to grow from about 800 people in 2000 to about 1300 in 2050. Boulder is projected to grow from 180 in 2000 to around 300 in 2050.

The river segment and the areas below Highway 12 are also used regularly by residents of Wayne County. Wayne County has the second highest percentage of federal land of any county in the state. The county

¹⁴ In the book *Visions of the Grand Staircase-Escalante* (compiled at the time of the Grand Staircase-Escalante National Monument planning process in the 1990s), Gail Blattenberger and David Kiefer acknowledge, "[m]inimum wages plus tips at Ruby's Inn are what the locals [in Garfield County] envisage from the service industry, but high tech service enterprises are also viable given an investment in communications infrastructure." Blattenberger and Kiefer suggest that while based on past performance "economic well-being" is clearly an issue in Kane and Garfield counties, "[e]xtractive industries are not an optimal or even a viable solution to the economic situation in these counties." Furthermore, "change will certainly come to these economies" and be met with "resistance (because of) the desire for a land-based economy (which is) seen as crucial to the quality of life in the rural West." According to the authors, the key is to "find ways of preserving our land-based Western heritage and lifestyle (which are so important to rural residents) along with the natural treasures of the countryside." Roughly 10 years later, we seem to face the same conditions, trends, attitudes, fears, opportunities, and challenges (Blattenberger and Kiefer 1998).

contains about 160,000 acres of National Forest System lands. The county contains the second fewest acres of private land in the state, trailing only Daggett County (which is four times smaller than Wayne County) by about 8,000 acres. From 2004 to 2005, Wayne County was only one of three counties to register negative population growth. The county had a -0.6% annual growth rate (the lowest in the State) (State of Utah 2006). However, from 2005 to 2050, the county is projected to almost double in population and grow at a 1.2 percent annual growth rate (State of Utah 2005).

Education and health services is the largest sector in the Wayne County economy. This sector is buoyed by the presence of Aspen Health Services' Aspen Achievement Academy, a wilderness therapy program that is a major county employer. Headquartered in Loa, the program operates on BLM and Forest Service lands. Government is the second largest sector in the county. Since 1980 agriculture has decreased dramatically and services have increased, a trend that is projected to continue into 2030. In 1980, agriculture made up 26.9 percent of the economy, while services took only a 3.5 percent share. By 2002, agriculture had declined to 13.8 percent and services had increased to 24.9 percent. In 2030, *People and the Forests* projects that agriculture will take a 6.5 percent share, while services will have increased to 30.3 percent (State of Utah 2003). This increase is visible in the increasingly popular tourist venue of Torrey at the gateway to Capitol Reef National Park.

While agriculture continues to decline, it is an important part of the county's traditions and customs. Many county residents work multiple jobs to keep the traditions of the past alive. The Wayne County General Plan identifies tourism promotion as an important economic development tool; however, there is concern over preserving quality of life while implementing this strategy.

Wayne County continues to struggle with issues of poverty. The county's 1999 poverty rate exceeded 15 percent, almost one and one-half times the state average (State of Utah 2003). Total personal income in Wayne County is the fourth lowest in the state. Growth rates of total personal income were second to last in the state from 2000 to 2003 (Bureau of Economic Analysis 2003).

Teasdale, Grover, and Torrey are the closest towns in Wayne County to the river segment. Torrey, population 171 (2005), is not expected to grow dramatically in the next 50 years. Other communities in Wayne County (e.g., Teasdale and Grover) are not expected to grow rapidly.

Current Administration and Funding Needs if Designated – The current administering agency is the USFS. U.S. Forest Service and BLM would share management of the segment.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

Not applicable as the segment is entirely on land managed by the Forest Service.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with

protection of river values.

Not applicable as the segment is entirely on land managed by the Forest Service.

(3) Support or opposition to designation.

Garfield County is working on a Resource Management Plan for all lands in the county. They have included an analysis of Wild and Scenic Rivers in their discussions. While their RMP supports the designation of Cataract Canyon (Colorado River) and the Dirty Devil River as Wild and Scenic Rivers, the county does not support the designation of Mamie Creek.

During the Dixie and Fishlake National Forests eligibility process, the county expressed repeated concern over the eligibility determinations made for this and other river segments on the Escalante Ranger District. The county does not believe that the Escalante River system is suitable because its flow is too regulated by irrigators.

When representatives of the Forest met with staff from the Navajo Nation and Hopi Nation in July 2006, the Tribes indicated that they favored “preservation” of forest resources including Wild and Scenic Rivers. No official communications from the Tribes confirming this support has been received.

During the scoping and DEIS comment periods, the forest did not receive many comments in support or opposition to the suitability of this river segment. Garfield County expressed some opposition. Opposition from these entities doesn’t appear to be as strong given that the segment is already protected by Wilderness designation. Many have questioned whether the additional protections available under wild and scenic rivers designation are necessary to protect the river segment. None of the three organized campaigns supported a positive suitability finding for this segment.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Downstream from the Forest Service boundary, GSENM found Mamie Creek on BLM lands below the forest boundary to be suitable for designation because of “high scenic quality, part of an ONA, high recreational use, natural bridge, fish and wildlife habitat, prehistoric and historic sites including an historic mail trail, and riparian areas” (Appendix 11, GSENM FEIS Monument Plan).

The Dixie National Forest, Glen Canyon National Recreation Area, Bryce Canyon National Park, and GSENM all worked together on eligibility for this river segment. Final determinations of suitability were reserved for individual agencies to make on their own.

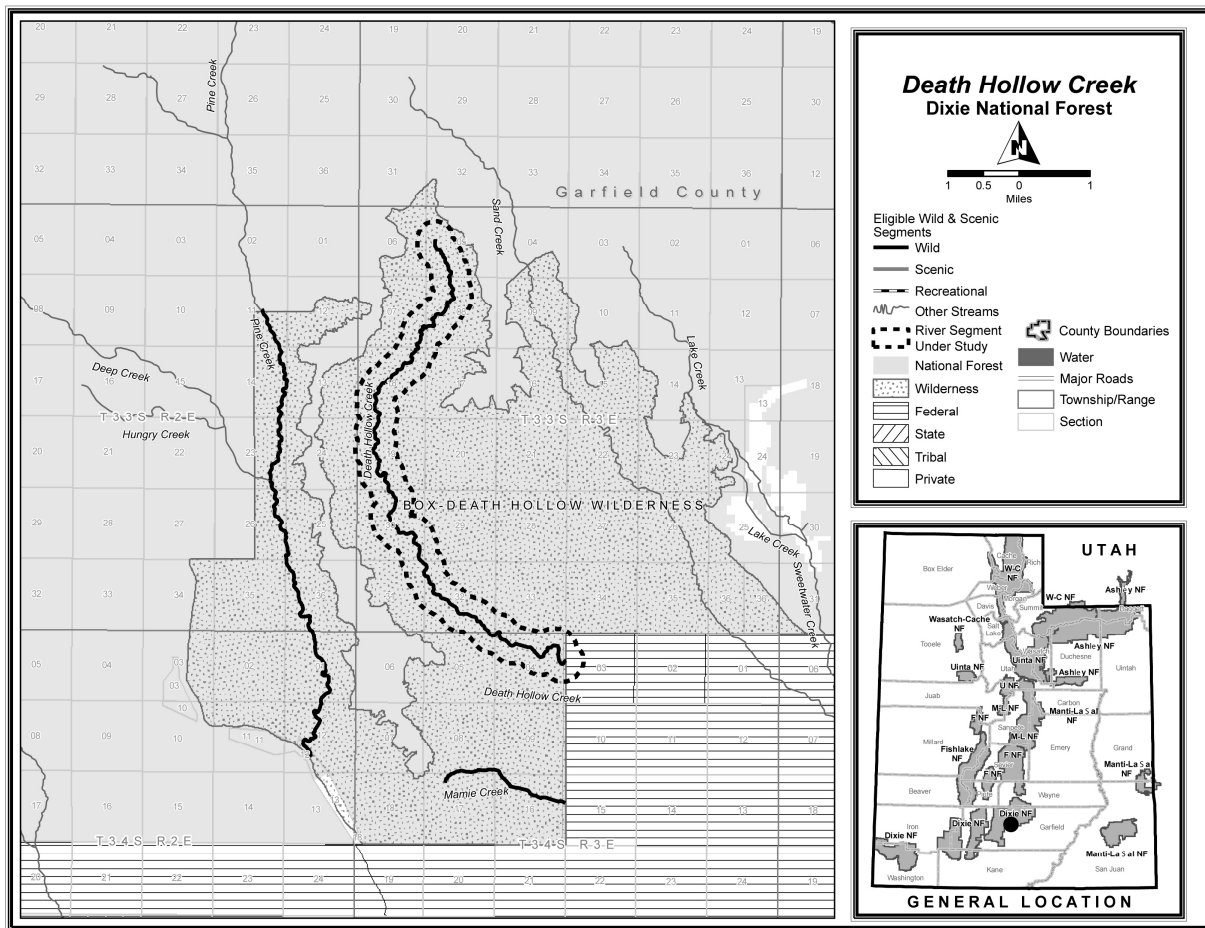
(5) Contribution to river system or basin integrity.

Mamie Creek was not noted by the GSENM as one of the Escalante River tributaries that contributes significantly to the flow of the Escalante River.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

No commitment has been expressed.

Death Hollow Creek Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Death Hollow Creek

River Mileage:

Studied: 19.5 miles, from headwaters to Mamie Creek

Eligible: 9.6 miles, from the headwaters to the forest boundary (Box-Death Hollow Wilderness Boundary)

Location:

Death Hollow Creek	Dixie National Forest, Escalante Ranger District, Garfield County, Utah		Congressional District 2	
	Start	End	Classification	Miles
Segment 1	SW ¼ NW ¼ Sect. 15, T 33S, R 3E, SLM	SE ¼ NE ¼ Sect. 4, T 34S, R 3E, SLM	Wild	9.6

Physical Description of River:

Death Hollow Creek is a small creek that runs down a broad canyon in the Box-Death Hollow Wilderness know as “Death Hollow”. The upper headwaters of Death Hollow Creek are located in open ponderosa pine stand with a manzanita understory that is surrounded by thousand foot cliffs. The upper reach of the river typically is ephemeral with flows typically occurring December through May, and following localized late summer thunderstorms. The lower reaches of the river flow through the Escalante

Monocline and into Navajo Sandstone where the canyon narrows into a slot canyon and slickrock pocket catch and hold water year-round.

ELIGIBILITY

Name and Date of Eligibility Document: Appendix 4, Wild and Scenic River Eligibility, Grand Staircase National Monument, 1998

Determination of Free-flow: There are no known diversions, impoundments, or other channel modifications of Death Hollow Creek on National Forest System lands.

Summary of Outstandingly Remarkable Values:

Scenic – Death Hollow Creek is a small creek that runs down a broad canyon in the Box-Death Hollow Wilderness known as “Death Hollow”. The upper headwaters of Death Hollow Creek are located in open ponderous pine stand with a manzanita understory that is surrounded by thousand foot cliffs. The upper reach of the river typically is ephemeral with flows typically occurring December through May, and following localized late summer thunderstorms. The lower reaches of the river flow through the Escalante Monocline and into Navajo Sandstone where the canyon narrows into a slot canyon and slickrock pocket catch and hold water year-round.

Recreational – There are no Forest Service system trails that access the river, but there is a route that is used to access the river as it carves its way down through the Box-Death Hollow Wilderness area. The access route starts on the “Hells Backbone Road” (FS Road #30153) and steeply descends down a rocky rough route. This access point acts as the only way to enter or leave the drainage without hiking 20 or more miles. The route receives very low use and is primarily used by hikers attempting to travel the brutal 3 to 4 day trip to the Escalante River. This route requires swimming, rock climbing, and advanced navigation skills. The lower half of the drainage is managed by the Grand Staircase-Escalante National Monument.

Ecological, cultural, wildlife, and paleontological – During the interagency process (between the Dixie National Forest, Grand Staircase-Escalante N.M., and Glen Canyon NRA), eligible river segments were identified across agency boundaries. ORVs were determined across the interagency segments. At the beginning of this Forest Service Utah Statewide Suitability project, the Forest Service revalidated the presence of individual ORVs on these river segments. Some ORVs were present on lands administered by other agencies (e.g., downstream on GSENM), but not found on the Forest Service administered segment. The ecological, cultural, wildlife, and paleontological ORVs identified in the interagency report is not found to be regionally significant on the Forest Service portions of the segment.

CLASSIFICATION

Basis for the Classification of River: Wild

There are no roads present in the river corridor. There are no Forest Service system trails that access the river. The river corridor is located entirely in the Box-Death Hollow Wilderness area.

SUITABILITY REPORT

Landownership and Land Uses – The eligible river corridor is a 9.6 mile-long river segment that encompasses about 2801 acres, and is entirely on National Forest System (NFS) lands in the Box-Death Hollow Wilderness, administered by the Dixie National Forest.

River Mile	Ownership	Acres
0 – 9.6	Dixie National Forest (Escalante Ranger District)	2801

Mineral and Energy Resource Activities – There are two suspended authorized oil and gas lease within the river corridor. The leases were filed in 1968 by D. Rowell for CO₂ mining at T 34S, R 3E, Section 4 and Section 6. Currently there is no activity or development associated with this lease.

Death Hollow Creek is located in the Box-Death Hollow Roadless Area. According to the Dixie National Forest Roadless Area Minerals Evaluation the potential for this area is as follows:

Mineral Potential:

Oil and Gas: Currently there are no producing oil or natural gas wells or fields in this area. However, Escalante Carbon Dioxide Field (Known Geologic Structure)—which contains and has been developed for carbon dioxide gas—lies partially within the Box-Death Hollow Wilderness Area and adjacent lands of this roadless area are being evaluated. Current leases within the wilderness area that predated wilderness designation have been suspended by BLM, pending further analysis. Wells within the wilderness area are shut-in. No additional leasing can occur with the wilderness because the Utah Wilderness Act of 1983 prohibits additional leasing. The shut-in wells with prior existing rights could be developed. The adjacent areas within this roadless area are available for leasing.

Oil potential associated with four possible plays (Late Proterozoic/Cambrian, Devonian-Pennsylvanian, Late Paleozoic, and Permo-Triassic Unconformity) is ranked as moderate to high (low certainty) along the eastern and southern portions of the Teasdale and Escalante Ranger Districts. This roadless area lies within this prospective area. Petroleum development potential is ranked by the UGS as low-moderate with the highest potential relative to the Devonian-Pennsylvanian and Permo-Triassic Plays. However, this area probably has lower potential due to the volcanic activity to the north and carbon dioxide gas occurrence. Natural gas occurrence and development potential is low-none.

Carbon Dioxide: The Escalante Carbon Dioxide Known Geologic Structure lies within this area as described above. Several expressions of interest for leasing and pre-sale offers have been made in this area for additional leasing, which are currently pending. If leases are issued, additional exploratory drilling and development could occur, however there is no market for carbon dioxide within a reasonable distance of the field and there are no pipelines in the general area to connect to for transport to existing market areas. Carbon dioxide occurrence potential is high but development potential is ranked as low-moderate due to the lack of a market.

Geothermal: Occurrence potential is unknown due to the lack of identified thermal wells and springs. Due to the lack of information, the development potential is considered low.

Coal: There are known mineable coal deposits in this area.

Locatable Minerals: There are no known valuable deposits of base or precious metals or other locatable minerals. Development potential is low.

Common Variety: There are known deposits of sandstones and colluvium derived from volcanic rocks to the north. There is potential for the development of sandstone and rounded colluvium for decorative or building stone, and riprap.

References:

Utah Geological Survey, 2004, The Oil, Gas, Coalbed Gas, Carbon Dioxide and Geothermal Resources of the Fishlake National Forest, Southwestern Utah, April 30, 2004.

Doelling, H.H., 1972. Southwestern Utah Coal Fields: Alton, Kaiparowits Plateau and Kolob-Harmony. Utah Geological and Mineralogical Survey, Monograph Series No. 1, 1972.

Water Resources Development – The study area is the stream section of Death Hollow Creek located within the Box Death Hollow Wilderness. The section begins at the Wilderness boundary in NWNE Section 6, T33S, R3E and ends at the Forest/Wilderness boundary in SENE Section 4, T34S, R3E.

According to the Utah State Division of Water Rights database, the only claim directly on Death Hollow Creek belongs to the Forest Service (97-540), claiming the portion of the stream in Section 4, T34S, R3E to the Forest boundary for stock watering. The BLM claims the portion of the stream just outside the boundary in Section 3, T34S, R3E (97-791).

There are no other claims within the Death Hollow and Right Fork Death Hollow sections of the Wilderness. There are two tributaries that appear to be the headwaters of Death Hollow Creek, but these are north of the Wilderness near Roger Peak, and the only claims within two miles of the tributaries belong to the Forest Service. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – There are no roads, trails, other facilities and/or other developments located in the river corridor.

Grazing Activities – The river segment is not located within any grazing allotment, therefore there is no grazing activities or development related to grazing.

Recreation Activities – There are no Forest Service system trails that access the river, but there is a route that is used to access the river as it carves its way down through the Box-Death Hollow Wilderness area. The access route starts on the “Hells Backbone Road” (FS Road #30153) and steeply descends down a rocky rough route. This access point acts as the only way to enter or leave the drainage without hike 20 or miles. The route receives very low use and is primarily use by hikers attempting to travel the brutal 3 to 4 day trip to the Escalante River. This route requires swimming, rock climbing, and advanced navigation skills. The lower half of the drainage is managed by the Grand Staircase-Escalante National Monument.

Other Resource Activities – Due to the limited access, steep terrain, and designated wilderness status other river corridor uses, such as timber harvest and farming, are not foreseeable uses.

Special Designations – The Death Hollow Creek river corridor is entirely located in the Box-Death Hollow Roadless Area (1999 Roadless Areas). The purpose of designated roadless areas under the 1999 Road Rule was “to restrict certain activities such as road construction and reconstruction into the unroaded portions of inventoried roadless areas and to establish a process for evaluating possible limitations on activities in other uninventoried unroaded areas through forest planning at the local level.”

The river corridor is also entirely located within the Box-Death Hollow Wilderness area. This area was designated in 1984 under the Utah Wilderness Act. The purpose of the wilderness designation was to ensure this area was free from modern human control or manipulation, was undeveloped and natural, and provides outstanding opportunities for solitude and a primitive and unconfined type of recreation.

Socio-Economic Environment – The river segment is located within Garfield County. Boulder and Escalante are the two closest towns. Access to the area is provided by Highway 12 – an All-American Road. Cottonwood Canyon flows from the Dixie National Forest onto the Grand Staircase-Escalante National Monument.

Garfield County is a largely rural county where traditional natural resource economic endeavors have dominated historically. In recent years, there has been a growth in recreation, tourism, and services. Much of this growth in recreation and tourism can be attributed to the designation of the Grand Staircase-Escalante National Monument in 1996. The county is struggling to retain rural traditions and lifestyles as well as “working” connections with the land. In the face of rising land values and globalization, traditional industries such as farming and ranching are becoming more difficult. Second home ownership has increased in the county dramatically. Over 60% of property tax notices in Garfield County are sent out of the county (39% out of state or country). Educating these occasional land users about special values and proper use is becoming more difficult.

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More specifically, trends and conditions:

Garfield County, the fifth largest county in the state has the highest percentage of federal land (over 90%) in a county in the state of Utah.¹⁵ The county contains over one million acres of National Forest System lands (including the Box-Death Hollow Wilderness Area) and large areas of other federal land, including portions of Grand Staircase-Escalante National Monument, Bryce Canyon National Park, Capitol Reef National Park, and Glen Canyon National Recreation Area. There are only about 170,000 acres of private land in the county. Public lands provide both challenges and opportunities for economic development in the county. The county is sparsely populated and is only projected to grow at a 1.0 percent annual rate between 2005 and 2050, a rate below the state average.

According to a 2003 Utah Bureau of Economic Analysis Report, Garfield County residents had one of the five lowest levels of total personal income in the state for 2003. Additionally, Garfield County had the second highest unemployment rate (10.8 percent) in the state according to 2003 Utah Department of Workforce Services information, exceeded only by Emery County’s 11.0 percent unemployment rate. Slow job growth and unemployment are recurrent problems for the county. Traditionally, county residents have relied primarily upon ranching and timber. While there is a desire to retain these traditional sources of economic opportunity, services related to recreation and tourism are growing quickly in the county. Services are projected to increase from a 30.1 percent share in the Garfield County economy in 2005 to a 37.8 percent share in 2030 (State of Utah 2003).

According to Garfield County, the growth in the recreation and tourism industries has not been strong enough to provide the economic growth that has been achieved in more diverse parts of the state (Bremner 2006).¹⁶ While these services (mostly related to leisure and hospitality) represent the largest

sector in the Garfield County economy, government jobs (the sector ranked second) make up a much higher percentage of payroll wages (State of Utah 2003). There is a perception that leisure and hospitality jobs will not pay as much as jobs in other more traditional sectors.¹⁷ According to Garfield County, “. . . Garfield County is struggling economically. Schools are showing declining enrollment, and additional natural resource based industries have been all but eliminated in the county. . . . Garfield County is struggling and unless changes [in land management and opportunities] are made relatively soon, things will get tougher,” (Bremner 2006). Also according to Garfield County Commissioner Maloy Dodds in testimony to Congress, “. . . most tourist-generated jobs generally are minimal skill, minimum wage jobs – not the kind that can support a family.” Another important fact that the Commissioner noted, “Federal destination areas [are] a mixed blessing at best” for Garfield County because increased visitors can be a burden to the county in terms of increased cost of garbage and search and rescue operations (Testimony to House Resources Committee’s Forest and Forest Health Subcommittee, June 15, 2005).

The closest communities to the river segment are Escalante and Boulder. Escalante is projected to grow from about 800 people in 2000 to about 1300 in 2050. Boulder is projected to grow from 180 in 2000 to around 300 in 2050.

The river segment and the areas below Highway 12 are also used regularly by residents of Wayne County.

Wayne County has the second highest percentage of federal land of any county in the state. The county contains about 160,000 acres of National Forest System lands. The county contains the second fewest acres of private land in the state, trailing only Daggett County (which is four times smaller than Wayne County) by about 8,000 acres. From 2004 to 2005, Wayne County was only one of three counties to register negative annual population growth. The county had a -0.6% growth rate (the lowest in the State) (State of Utah 2006). However, from 2005 to 2050, the county is projected to nearly double in population and grow at a 1.2 percent annual growth rate (State of Utah 2005).

Education and health services are the largest sector in the Wayne County economy. This sector is buoyed by the presence of Aspen Health Services’ Aspen Achievement Academy, a wilderness therapy program that is a major county employer. Headquartered in Loa, the program operates on BLM and Forest Service lands. Government is the second largest sector in the county. Since 1980 agriculture has decreased dramatically and services have increased, a trend that is projected to continue into 2030. In 1980, agriculture made up 26.9 percent of the economy, while services took only a 3.5 percent share. By 2002, agriculture had declined to 13.8 percent and services had increased to 24.9 percent. In 2030, *People and the Forests* projects that agriculture will take a 6.5 percent share, while services will have increased to 30.3 percent (State of Utah 2003). This increase is visible in the increasingly popular tourist venue of Torrey at the gateway to Capitol Reef National Park.

While agriculture continues to decline, it is an important part of the county’s traditions and customs. Many county residents work multiple jobs to keep the traditions of the past alive. The Wayne County General Plan identifies tourism promotion as an important economic development tool; however, there is concern over preserving quality of life while implementing this strategy.

¹⁷ In the book *Visions of the Grand Staircase-Escalante* (compiled at the time of the Grand Staircase-Escalante National Monument planning process in the 1990s), Gail Blattenberger and David Kiefer acknowledge, “[m]inimum wages plus tips at Ruby’s Inn are what the locals [in Garfield County] envisage from the service industry, but high tech service enterprises are also viable given an investment in communications infrastructure.” Blattenberger and Kiefer suggest that while based on past performance “economic well-being” is clearly an issue in Kane and Garfield counties, “[e]xtractive industries are not an optimal or even a viable solution to the economic situation in these counties.” Furthermore, “change will certainly come to these economies” and be met with “resistance (because of) the desire for a land-based economy (which is) seen as crucial to the quality of life in the rural West.” According to the authors, the key is to “find ways of preserving our land-based Western heritage and lifestyle (which are so important to rural residents) along with the natural treasures of the countryside.” Roughly 10 years later, we seem to face the same conditions, trends, attitudes, fears, opportunities, and challenges (Blattenberger and Kiefer 1998).

Wayne County continues to struggle with issues of poverty. The county's 1999 poverty rate exceeded 15 percent, almost one and one-half times the state average (State of Utah 2003). Total personal income in Wayne County is the fourth lowest in the state. Growth rates of total personal income were second to last in the state from 2000 to 2003 (Bureau of Economic Analysis 2003).

Teasdale, Grover, and Torrey are the closest towns in Wayne County to the river segment. Torrey, population 171 (2005), is not expected to grow dramatically in the next 50 years. Other communities in Wayne County (e.g., Teasdale and Grover) are not expected to grow rapidly.

Current Administration and Funding Needs if Designated – The current administering agency is the USFS. The Dixie National Forest in cooperation with the GSENM would administer and manage a designated river segment.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

Not applicable as the segment is entirely on land managed by the National Forest.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Not applicable as the segment is entirely on land managed by the National Forest.

(3) Support or opposition to designation.

Garfield County is working on a Resource Management Plan for all lands in the county. They have included an analysis of Wild and Scenic Rivers in their discussions. While their RMP supports the designation of Cataract Canyon (Colorado River) and the Dirty Devil River as Wild and Scenic Rivers, the county does not support the designation of Death Hollow Creek.

During the Dixie and Fishlake National Forests eligibility process, the county expressed repeated concern over the eligibility determinations made for this and other river segments on the Escalante Ranger District. The county does not believe that the Escalante River system is suitable because its flow is too regulated by irrigators.

When representatives of the Forest met with staff from the Navajo Nation and Hopi Nation in July 2006, the Tribes indicated that they favored "preservation" of forest resources including Wild and Scenic Rivers. No official communications from the Tribes confirming this support have been received.

During the scoping and DEIS comment periods, the forest received many comments on Death Hollow Creek. Many people and groups expressed interest in seeing this river segment designated. It was part of a group of rivers suggested for a positive suitability finding by a group of conservation organizations. All

of the three organized campaigns supported a positive suitability finding for this segment. Garfield County and others are opposed to designation. Opposition from these entities doesn't appear to be as strong given that the segment is already protected by Wilderness designation. Many have questioned whether the additional protections available under wild and scenic rivers designation are necessary to protect the river segment.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Downstream from the forest boundary, the GSENM found Death Hollow Creek to be suitable for designation because of "high scenic quality, part of an ONA, southwestern willow flycatcher habitat, prehistoric sites, dinosaur tracks, and riparian areas" (Appendix 11, GSENM FEIS Monument Plan).

The Dixie National Forest, Glen Canyon National Recreation Area, Bryce Canyon National Park, and GSENM all worked together on eligibility for this river segment. Final determinations of suitability were reserved for individual agencies to make on their own.

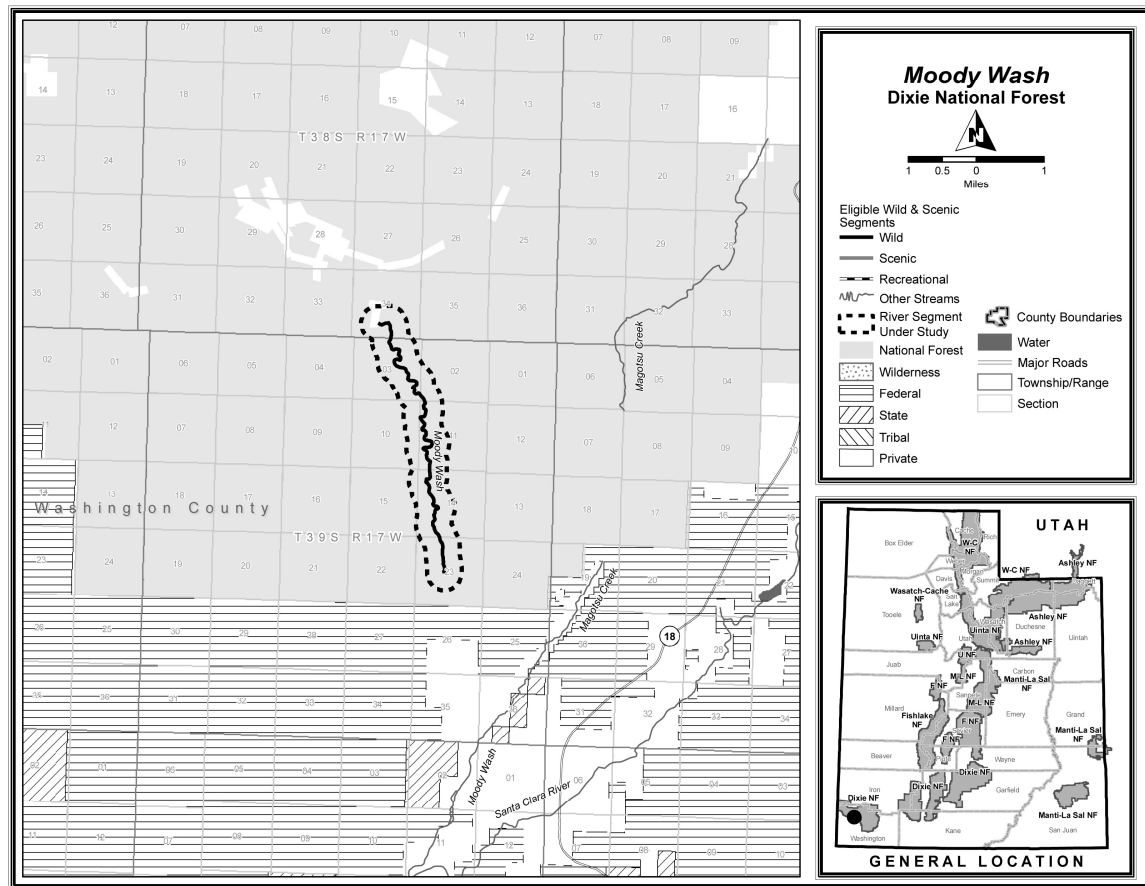
(5) Contribution to river system or basin integrity.

The GSENM Management Plan and associated analysis identified Death Hollow Creek among the primary contributors to the Escalante River system.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

No commitment has been expressed.

Moody Wash River Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Moody Wash

River Mileage:

Studied: 12 miles, from headwaters to Santa Clara River

Eligible: 5 miles, from headwaters to Forest boundary

Location:

Moody Wash	Dixie National Forest, Pine Valley Ranger District, Washington County, Utah		Congressional District 2	
	Start	End	Classification	Miles
Segment 1	SW/SW 34 T 38 S R 17 E, SLM	SW/NW 23 T 39 S R 17 E, SLM	Wild	5*

*Eligibility determinations were made pending “ground truthing” of ORVs. Upon ground truthing Moody Wash, it was determined that only 5.08 miles contained the ORV. The new segment reflects the segment that is truly eligible.

Physical Description of River:

Moody Wash is a semi-arid desert stream system that is very closely connected to and dependant upon a shallow alluvial groundwater table. The mainstem of Moody Wash from its beginning approximately one mile above the Racer Canyon confluence to near the Forest boundary is considered a mid-elevation, transitional reach characterized by regular upwelling and downwelling of surface flow. Summer low

flows become intermittent, with areas of downwelling and upwelling that support and maintain a cottonwood and willow riparian plant community. The area is semi-arid, with average annual precipitation of approximately 12-18 inches. High flows typically occur December through May, but peak flows also occur from localized late summer thunderstorms. The upper headwaters of Moody Wash are typically more ephemeral in nature due to the small catchment's area that supplies runoff. The middle mainstem reach of Moody Wash primarily consists of narrow, single channel reaches with occasional wider sediment deposition zones. Seeps at the beginning of the mainstem, as well as flow from Racer Canyon, contribute to perennial surface flows in this reach. The approximately last 1.5 miles of the stream to the Forest boundary broaden out into a large depositional area that tends towards a multi-threaded channel system. This depositional area extends below the Forest boundary and is naturally more ephemeral in nature due to regular subbing of surface water into the streambed sediments. Moody Wash develops surface flow again just upstream of the confluence with Magotsu Creek.

ELIGIBILITY

Name and Date of Eligibility Document: Fishlake and Dixie National Forests Wild and Scenic River Eligibility Evaluation, June 2007

Determination of Free-flow: There are no known diversions, impoundments, or other channel modifications of Moody Wash on National Forest System lands. The river segment is intermittent in the traditional sense with water flowing at the surface in some places and below the surface in other places. Where the river flows below ground, the shallow water table supports riparian vegetation and often puddles.

Summary of Outstandingly Remarkable Values (ORV):

Ecological – Moody Wash is a semi-arid desert stream system that is very closely connected to and dependant upon a shallow alluvial groundwater table. Summer low flows become intermittent, with areas of downwelling and upwelling that support and maintain a cottonwood and willow riparian plant community. Flows also support year-round populations of Virgin spinedace, speckled dace, and desert sucker, and amphibians such as the Arizona toad and canyon tree frog. The shallow groundwater table is recharged from winter-spring flows and summer thunderstorm flows, which also provide periods of perennial flow throughout the drainage, connecting populations of fish species during these high flows. Unlike the majority of similar systems in southwest Utah and the southwest U.S. that have been impacted by development, groundwater pumping, channel modifications, and invasive species such as tamarisk, Moody Wash is still a fully functioning semi-arid desert stream system. Moody Wash supports healthy, self-sustaining populations of native wildlife, including State of Utah sensitive species, and diverse, resilient riparian plant communities.

Geological/Hydrological – Moody Wash's close connectivity to a shallow alluvial groundwater table as well as its regular inundation by flood events play a primary role in the support of the riparian and aquatic ecosystem. The mainstem of Moody Wash from its beginning approximately 1 mile above the Racer Canyon confluence to near the Forest boundary is considered a midelevation, transitional reach characterized by regular upwelling and downwelling of surface flow. Because of these conditions, this kind of system is particularly sensitive to human disturbances such as dams, diversions, and groundwater pumping. Moody Wash is unique to other semi-arid streams in southwest Utah in that it is a rare system that has not been impaired by these common kinds of disturbances, and is still intact and functioning. In addition, Moody Wash is unique to the majority of other stream systems in southwest Utah draining into the Virgin River Basin in that it is dominated by volcanic geology versus the more typical sedimentary limestone and sandstone well known to the area.

Fish – Moody Wash is considered a very important refuge area for Virgin spinedace (*Lepidomeda mollispinis mollispinis*), a state sensitive species, in the Virgin River Basin. It is the only tributary to the

Santa Clara River that has its historic range intact and occupied. During annual periods of high flow spinedace are connected throughout the drainage; in periods of low flow spinedace recede to upper areas of perennial flow as refugia habitat. The population of Virgin spinedace in Moody Wash is a self-sustaining, breeding population, and is considered an important population that could be used to restock other areas. Moody Wash also contains desert sucker (*Catostomus clarkia*), also a state sensitive species list, speckled dace (*Rhinichthys osculus*), and habitat for the Arizona toad (*Bufo microscaphus*) (also called southwestern toad), another state sensitive species.

CLASSIFICATION

Basis for the Classification of River: Wild

There are approximately two miles of motorized four-wheel-drive route along the lower section of Moody Wash to the Forest boundary. The rest of the access in Moody Wash and Racer Canyon is via a non-motorized trail. A major utility corridor crosses Moody Wash near the Forest boundary.

SUITABILITY REPORT

Landownership and Land Uses – The eligible river corridor consist is a 8.85 mile-long river segment encompasses about 2615.3 acres, and is predominantly on National Forest System (NFS) lands administered by the Dixie National Forest. The segment does have a 14.79 acre privately-owned section of property that is located within the corridor. In addition, there is a 39.47 acre section of privately-owned property directly bisects the river segment, and occurs entirely within the corridor. The river segment through the privately-owned property is 0.2 miles long.

River Mile	Ownership	Acres
0 – 3.07	Dixie National Forest (Pine Valley Ranger District)	982
3.07 – 3.27	Private land (40 acres lot size, 0.2 mile segment)	40
3.27 – 5.08	Dixie National Forest (Pine Valley Ranger District)	1786
Total:		2802 acres

Moody Wash	Start	End	Miles
Dixie National Forest	SE ¼ SE ¼ Sect. 30, T 38S, R 17W, SLM	NE ¼ SW ¼ Sect. 34, T 38S, R 17W, SLM	3.07
Private Land	NE ¼ SW ¼ Sect. 34, T 38S, R 17W, SLM	NE ¼ SW ¼ Sect. 34, T 38S, R 17W, SLM	0.2
Dixie National Forest	NE ¼ SW ¼ Sect. 34, T 38S, R 17W, SLM	SW ¼ SE ¼ Sect. 23, T 39S, R 17W, SLM	1.81

Mineral and Energy Resource Activities – There are no existing salable, locatable, or leasable mineral and energy resources development in the eligible segment. There are two closed claims located on the private land. The first closed claim was an oil and gas lease from 1980 to 1986 (E ½ of NW ¼ NW ¼ sect. 34, T 38, R 17W SLM—lots 1-7). The second closed claim was an abandonment claim from 1988 to 1994 (NW ¼ SW ¼ sect. 34, T 38, R 17W SLM) (NE ¼ SE ¼ sect. 33, T 38, R 17W SLM).

Moody Wash is located in the Moody Wash Roadless Area. According to the Dixie National Forest Roadless Area Minerals Evaluation the potential for this area was as follows:

Oil and Gas: Currently there are no producing wells or fields in this area. It has been only lightly

explored.

Tertiary volcanic rocks cover the entire area. Oil potential associated with the hypothetical Late Paleozoic play is ranked as moderate (low certainty).

This area is not prospective for the discovery of natural gas due to the occurrence of volcanic rock and the lack of known source rocks. The Cretaceous conventional play associated with trap structures in Cretaceous sandstones and coalbed methane in the coal bearing Cretaceous Dakota Formation as are the southern portions of the other Dixie National Forest Districts to the east. In the southern areas of the other Districts occurrence potential is rated by the UGS as moderate (low to moderate certainty). Development potential is rated as low because the area is remote from established markets and pipelines and the maturity of the source rocks is questionable on providing adequate hydrocarbon generation for economic accumulations.

If leases are issued, exploratory drilling could occur.

Carbon Dioxide: This area is extremely faulted and deformed. Low potential for occurrence (low certainty). Development potential is low-none because there is no market.

Geothermal: There are known Geothermal Resource areas to the north and south outside the Forest boundaries. However, occurrence potential is rated as unknown due to the lack of identified thermal wells and springs. Development potential is low.

Coal: This area is located along the northern extent of the New Harmony Coal Field. Any coal seams in the area have been extensively deformed and faulted by uplift and formation of the Pine Valley Mountains. Occurrence potential is low-moderate and development potential is low-none.

Locatable Minerals: There are no active mining claims in this area. There are no known valuable locatable mineral deposits in this area. However, faulted igneous rocks dominate the area, indicating that the area may be prospective for base and precious metals. Occurrence and development potential are considered to be low-moderate.

Common Variety: Igneous rocks cover the entire area. Igneous rock and associated colluvium could be developed for riprap, gravel, landscaping rock, and building stone. Development potential is considered moderate, probably on a small scale.

References:

Utah Geological Survey, 2004, The Oil, Gas, Coalbed Gas, Carbon Dioxide and Geothermal Resources of the Fishlake National Forest, Southwestern Utah, April 30, 2004.

Doelling, H.H., 1972. Southwestern Utah Coal Fields: Alton, Kaiparowits Plateau and Kolob-Harmony. Utah Geological and Mineralogical Survey, Monograph Series No. 1, 1972.

Bullock, Kenneth C., 1970. Iron Deposits of Utah. Utah Geological and Mineralogical Survey, Bulletin 88, December 1970.

Smith, Martha R., and Milligan, Mark R., Metalliferous Resources of Utah, Public Information Series 57, Utah Geological Survey, Salt Lake City, Utah

Water Resources Development – There are no historic, current, or known planned Federal Energy Regulatory Commission permits or license applications for this corridor. There are no dams, diversions,

or other channel modifications on this segment. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – Forest Service Road # 30860 provides access to the lower two mile of Moody Wash and is located in the river corridor. The road also forks 0.5 miles up from the Forest boundary and follows the utility corridor. Forest Service Road #30354 dead-ends 0.25 mile from the upper reach of the river corridor. A non-system non-motorized trail continues from the roads terminus and follows the river corridor down to FS Road's #30860 terminus. The non-system non-motorized trail is on National Forest land with the exception of where it crosses the 40 acre parcel of privately-owned land.

There is a developed springhead located at the Forest Service owned water right (S. 1980ft., E. 660 ft. from the N corner of Section 33, T 38S, R 17W.). The purpose of the development is to provide water for cattle on the Bull Valley Allotment.

A major utility corridor crosses the river corridor approximately 0.6 mile north of the forest boundary (SE ¼ NW ¼ sect. 23, T 39, R 17W SLM). The utility corridor contains a power-line, two buried natural gas pipelines, and one buried fiber-optic line. The power-lines span from bank-to-bank, while the natural gas lines and the fiber-optic line are subsurface within the river corridor.

There are no developments on the privately-owned land within the river corridor.

Grazing Activities – The river segment is located within the Bull Valley Allotment (#00102) and the Gunlock Allotment (#00106). The Bull Valley allotment consists of 37,927 acres and is an active allotment with seven permittees. The Gunlock Allotment consists of 42,034 acres and is an active allotment with five permittees.

Bull Valley Allotment		
<u>Permittee Name</u>	<u>Number of mature cow/Nursing</u>	<u>Active Grazing Dates</u>
S.C. Cattle Co.	16	06/01 to 09/30
W. & R. Mathis	27	06/01 to 09/30
D.G. Hafen	49	06/01 to 09/30
G. B. Ranch	97	06/01 to 09/30
D. Frei	103	06/01 to 09/30
S. Frei	52	06/01 to 09/30
J.C. Frei	127	06/01 to 09/30

Gunlock Allotment		
<u>Permittee Name</u>	<u>Number of mature cow/Nursing</u>	<u>Active Grazing Dates</u>
E.L. Bowler	159	06/01 to 09/30
M.T. & L.L. Bowler	66	06/01 to 09/30
J.M. & S.L Bowler	61	06/01 to 09/30
J.H. Bowler	84	06/01 to 09/30
F.L. & M.E. Bowler	248	06/01 to 09/30

Recreation Activities – Recreational use of the Moody Wash drainage is considered low. Currently both FS Road #30860 and #30354 receive low to moderate ATV/OHV use. The lower section of FS Road #30860 does receive low to moderate use from full-size vehicles, but most tend to follow the utility

corridor to the east. The non-system trail that access Moody Wash is considered a low use trail, but does receive use for grazing administration and hunting purposes.

Other Resource Activities – Due to the limited access, topography, and vegetation composition, other river corridor uses, such as timber harvest and farming, are not foreseeable uses. Pine Valley Ranger District has experienced frequent and large fires. Restoring vegetation, post-fire, can be a challenge for land managers. Some of the most successful methods for seeding areas post-fire involved mechanical manipulation of the land and heavy equipment.

Special Designations – The Moody Wash river corridor is entirely located in the Dixie National Forest’s Moody Wash Roadless Area (1999 Roadless Areas). The purpose of designated roadless areas under the 1999 Road Rule was “to restrict certain activities such as road construction and reconstruction into the unroaded portions of inventoried roadless areas and to establish a process for evaluating possible limitations on activities in other uninventoried unroaded areas through forest planning at the local level.”

Socio-Economic Environment – The river segment and corridor are all located within Washington County. The eastern part of Washington County (particularly St. George, Hurricane, and Washington cities) is one of the fastest growing areas in the entire country. The river segment is located in the very sparsely populated and rugged western part of the county. Local towns such as Veyo, Gunlock, Central, and Pine Valley are likely to see some growth in the next 20-50 years – approximately doubling by 2020, then six times larger by 2050 – but will remain less densely populated than the eastern part of the county which is expected to grow to over a half million people by 2050. The western communities retain much of their rural character and lifestyle. Ranching and farming still dominate the communities.

More specific information about Washington County:

The rugged National Forest System lands in the county include the 50,200-acre Pine Valley Mountain Wilderness Area north of St. George. The lack of future developable private lands to accommodate projected growth is a major issue for county leaders (Washington County Commission 2006). Due to mild winter weather and the quality of life offered by the area (which includes proximity to public lands¹⁸), Washington County has been the fastest growing county in the state (and one of the fastest in the country (U.S. Census Bureau 2005)) for the past several years. Growth is spread across the county. Annual growth rates for the communities of Washington, Hurricane, Ivins, and Santa Clara from 2000 to 2002 exceeded 10 percent, surpassing even St. George (State of Utah 2005). From 2004 to 2005 the county grew at a rate of 8.4 percent (State of Utah 2006). The county is projected to sustain a 3.9 percent growth rate through 2050, with total population projected to increase from 125,010 people in 2005 to 607,334 people by 2050 (State of Utah 2005). Much of the growth seen in recent years is due to the relocation of retiring baby-boomers to the area. Increased conflicts over the availability of private land, water, and open space will be a key trend in this area (State of Utah 2003, Washington County Commission 2006).

The trade, transportation, and utilities sector is currently the largest industry in Washington County (State of Utah 2003). In the period from 1980 to 2002, as the economy grew (service sector doubled) in other areas, many traditional industries (e.g., farming and ranching) saw their share of the county economy decrease. In fact, agriculture went from almost 5 percent of the economy to 1 percent (State of Utah 2003).

Between 2005 and 2030, government employment will likely remain the same and services will continue to grow, while traditional industries will likely continue to struggle. Health and education services are

¹⁸ It is unclear how much of an impact the proximity to National Forest System lands contributes to bringing people to relocate in the region. This is an area for future research.

expected to grow to meet the demands of increased population (State of Utah 2003).

Washington County has a high job growth rate (Utah Business 2006) and a relatively diverse economic base. Per capita income in Washington County more closely approaches state averages than other counties in the planning area (State of Utah 2003). Low wages in the tourism industry are a concern for county officials (Washington County Commission 2006). Despite being below state averages for wage income, Washington County residents, buoyed by retirees, have the fifth highest total personal income in the state. Total personal income increased at the second fastest rate (exceeded only by Uintah County) in the state during the period from 2000 to 2003 (Bureau of Economic Analysis 2003).

Much of the Washington County General Plan is focused on public lands issues. County leaders will continue to seek working relationships with federal agencies to improve management of Federal lands that are viewed as critical to the county economy.

Current Administration and Funding Needs if Designated – The U.S. Forest Service would be the administering agency if the river segment were designated. There is an existing conservation agreement that is being coordinated by the Utah Division of Wildlife Resources for the Virgin River Spinedace.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

U.S. Forest Service officials met with the Washington County Commission and the Washington County Water Conservancy District director on June 5, 2007. At the meeting, the Washington County Conservancy District indicated a willingness and interest in participating in watershed improvement projects in the Moody Wash area.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

The Utah Division of Wildlife Resources has a Conservation Agreement for the Virgin River Spinedace. This agreement – which the Forest Service participates in as a partner – should serve to protect fish species and provide for water quantity/quality and other resource benefits.

(3) Support or opposition to designation.

During the forest's eligibility process, the Dixie National Forest received comments from the Washington County Commission and Washington County Water Conservancy District in opposition to eligibility. In subsequent meetings, both entities have expressed opposition to suitability as well.

Local ranchers are the primary users of the river corridor. With the exception of Ed Bowler, who attended the June 5, 2007 meeting with the county and conservancy district to express concern, most of these people have not been actively involved in the public process. Anecdotally, they do not support designation of the river segment.

When representatives of the Forest met with staff from the Navajo Nation and Hopi Nation in July 2006, the Tribes indicated that they favored “preservation” of forest resources including Wild and Scenic Rivers. No official communications from the Tribes confirming this support have been received.

During the scoping and DEIS comment periods, the forest received many comments on Moody Wash. Many people expressed interest in seeing this river segment designated. It was part of a group of rivers suggested for a positive suitability finding by a group of conservation organizations. All of the three organized campaigns supported a positive suitability finding for this segment. Washington County, Washington County Water Conservancy District, and others have expressed strong opposition to designation. Meanwhile, strong interest has been expressed from many parties (including local and state government) in greater conservation measures for protection of some of the species and ecological qualities of the river segment.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Designation would contribute to state and regional protection and recovery objectives for the Virgin spinedace outlined in the Virgin Spinedace Conservation Agreement and Strategy.

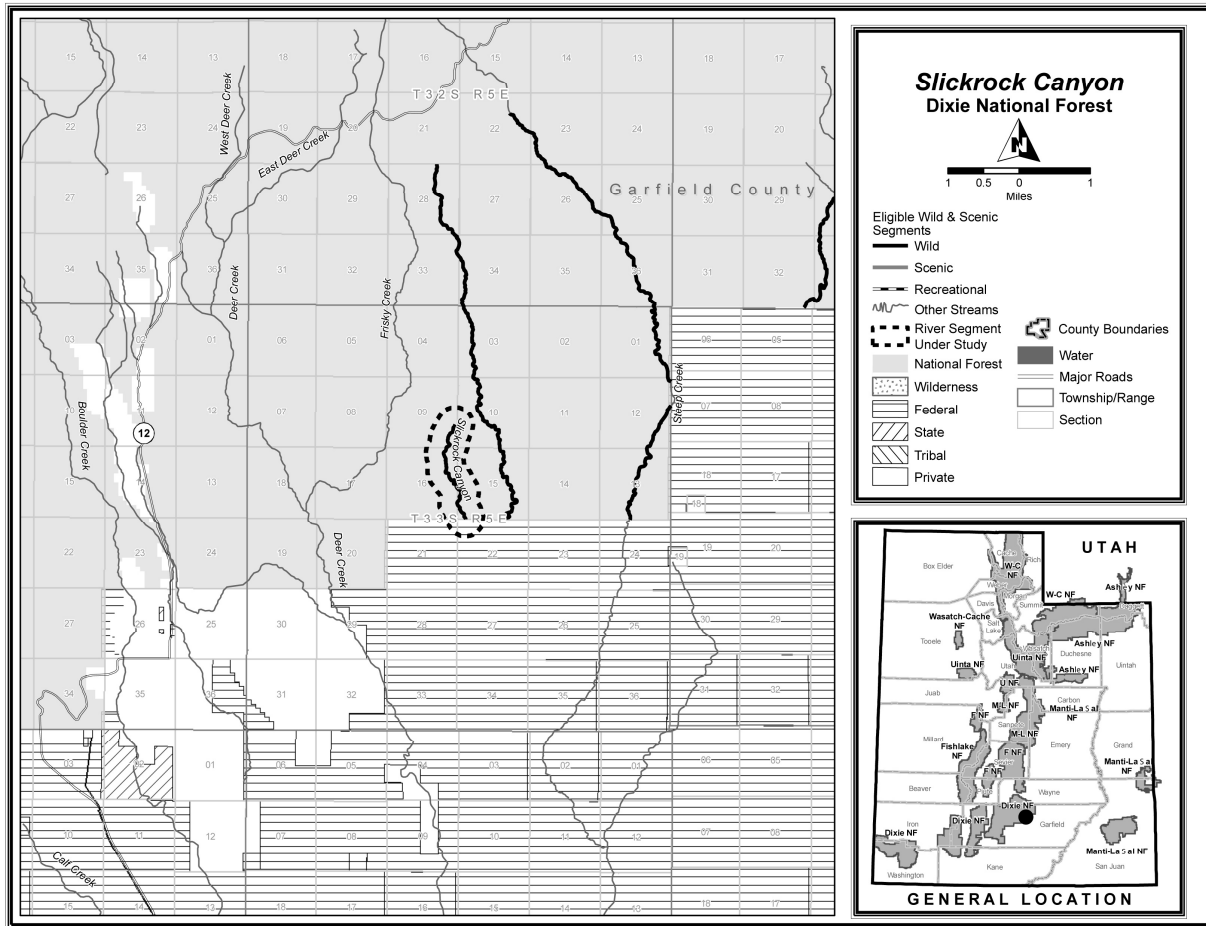
(5) Contribution to river system or basin integrity.

The Virgin River Water Basin is very large and Moody Wash does not contribute much water to the basin. It is a unique area in the basin because of the volcanic geology, but isn’t likely critical to basin integrity.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment. Washington County Water Conservancy District has expressed a willingness to help provide volunteers and to partner for water conservation and for watershed improvement.

The Dixie NF is beginning to coordinate with the Utah Division of Wildlife Resources on developing some form of cooperative management strategy in Moody Wash (meeting in the works for fall 2007), as well as the Dixie National Forest becoming involved with the Virgin Spinedace Conservation Team. With active coordination with these groups, there is a high level of partnership potential.

Slickrock Canyon Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Slickrock Canyon

River Mileage:

Studied: 4.4 miles, from headwaters to private land (T 33S, R 5E, Sect. 33)

Eligible: 1.6 miles, from headwaters to Forest boundary

Location:

Slickrock Canyon	Located on Dixie National Forest, administered by Fishlake National Forest, Fremont River Ranger District, Garfield County, Utah		Congressional District 2	
	Start	End	Classification	Miles
	NE ¼ SE ¼ Sect. 9, T 33S, R 5E, SLM	SW ¼ SW ¼ Sect. 15, T 33S, R 5E, SLM	Wild	1.6

Physical Description of River: Slickrock Canyon is located on the Fremont River Ranger District below Highway 12. The canyon is dominated by slickrock and ledge with pinyon and juniper trees transitioning to ponderosa pine. This is an ephemeral/intermittent stream.

ELIGIBILITY

Name and Date of Eligibility Document: Appendix 4, Wild and Scenic River Eligibility, Grand Staircase Escalante National Monument (GSENM), 1998.

Determination of Free-flow: There are no known diversions, impoundments, or other channel modifications of Slickrock Canyon on National Forest System lands.

Summary of Outstandingly Remarkable Values (ORV):

Scenic – The area offers dramatic contrasts of color, texture, and slope common to other similar drainages in the surrounding landscape. This short segment (1.6 miles) of riparian corridor on the Fishlake National Forest parallels Cottonwood Canyon, yet is broader and more intermittent. The east facing escarpment of the mesa to the west, which the Long Neck Trail (non-motorized) traverses towards the north, is a significant visual feature as seen from this limited segment. The scenic value of the area is less than that found lower in the drainage on the GSEM

Recreational – The area within the canyon itself on the Fishlake National Forest receives a low-level of use by hikers and backpackers. The Long Neck Trail (#34017) located to the west above on the mesa, facilitates access to this segment’s headwaters area. The steep winding canyon itself, though relatively accessible from the north via this trail, provides both solitude and a primitive experience and accordingly is used by Boulder Outdoor Survival.

Cultural – The area has been used intermittently by Native Americans and pioneers. On top of Long Neck Mesa to the west there is a cabin near the beginning of the Long Neck Trail which is estimated to be over 50 years of age.

Ecological – The stream (although intermittent) and associated riparian areas are vital to an otherwise desert ecosystem.

This stream was determined to be eligible by an interagency study headed by the Grand Staircase Escalante National Monument in 1998.

CLASSIFICATION

Basis for the Classification of River: Wild

There are no roads present in the river corridor. There is a non-motorized trail that parallels the river to the west that is located within the corridor.

SUITABILITY REPORT

Landownership and Land Uses – The eligible river corridor is a 1.6 mile-long river segment and encompasses 1,866 acres, and is entirely on National Forest System (NFS) lands administered by the Fishlake National Forest.

River Mile	Ownership	Acres
0 – 1.6	Dixie National Forest administered by the Fishlake National Forest (Fremont River Ranger District)	1866
	Total	1866

The stream corridor is within Management Area 2A# (MA-2A#) according to the Dixie National Forest Plan. MA-2A# has a management emphasis on semi-primitive recreation opportunities with a “no surface occupancy” stipulation for mineral entry. The area provides multiple uses.

Mineral and Energy Resource Activities – There are no existing salable, locatable, or leasable mineral and energy resources development in the eligible segment.

Slickrock Canyon is located in the Long Neck Mesa/Steep Creek/Oak Creek Roadless Area. According to the Dixie National Forest Roadless Area Minerals Evaluation the potential for this area was as follows:

Oil and Gas: Currently there are no producing wells or fields in this area. It has been only lightly explored. There are no leases, but industry has expressed interest in this general area. Expressions of Interest have been made for the area immediately to the northeast.

Oil potential associated with four possible plays (Late Proterozoic/Cambrian, Devonian-Pennsylvanian, Late Paleozoic, and Permo-Triassic Unconformity) is ranked as moderate to high (low certainty) along the eastern and southern portions of the Teasdale and Escalante Ranger Districts. Petroleum development potential is ranked by the UGS as low-moderate with the highest potential relative to the Devonian-Pennsylvanian and Permo-Triassic Plays. If leases are issued, exploratory drilling could occur. A total of 32 new exploratory wells are reasonably foreseeable for the Forest in the next 15 years. Of this total, only a couple of these would probably occur in this area. If a discovery were made, additional development wells could be drilled.

Jurassic sediments (Navajo Sandstone and Carmel Formation) are exposed in the area, however this area is not prospective for natural gas/methane due to the close proximity to the volcanic rocks of Boulder Mountain immediately to the west as well as uplift and erosion of known source/reservoir Cretaceous sedimentary rocks.

Carbon Dioxide: Moderate potential for occurrence (low certainty). Development potential is low-none because there is no market.

Geothermal: Occurrence potential is unknown due to the lack of identified thermal wells and springs. Due to the lack of known geothermal springs and wells and overall information, the development potential is considered low.

Coal: There are no known coal deposits in this area

Locatable Minerals: There are no known valuable deposits of base or precious metals or other locatable minerals. Development potential is low.

Common Variety: Sandstone, limestone and other sedimentary rocks in the area could be developed for decorative stone or building stone. Colluvium consisting of displaced sedimentary rocks and volcanic rock transported from Boulder Mountain could be developed for riprap, decorative stone, and building stone. Development potential is considered moderate, most likely on a small scale, localized basis.

References:

Utah Geological Survey, 2004, The Oil, Gas, Coalbed Gas, Carbon Dioxide and Geothermal Resources of the Fishlake National Forest, Southwestern Utah, April 30, 2004.

Doelling, H.H., 1972. Southwestern Utah Coal Fields: Alton, Kaiparowits Plateau and Kolob-Harmony. Utah Geological and Mineralogical Survey, Monograph Series No. 1, 1972.

Water Resources Development – There are no known planned or existing water developments (dams, diversions or channel modifications) on these segments. There are no historic, current, or known planned Federal Energy Regulatory Commission permits or license applications for this corridor. Designation into the Wild and Scenic river system does not affect existing, valid water rights

Transportation, Facilities, and Other Developments – The Longneck Trail (#34017) parallels the river on the plateau above to the west. The Longneck Trail is located on the Dixie National Forest (Escalante Ranger District) and is a non-motorized pack and saddle trail that is considered a low use trail.

There are no other facilities and/or other developments located in the river corridor. Slickrock Canyon river corridor is entirely located in the Long Neck Mesa/Steep Creek/Oak Creek Inventoried Roadless Area.

Grazing Activities – The river segment is located within the Oak Creek Allotment. The Oak Creek Allotment consists of 72,712 acres and is an active allotment with three permittees. There is a section of cattle fencing that extends 600 feet into the river corridor, but does not bisect the river.

Oak Creek Allotment		
<u>Permittee Name</u>	<u>Number of mature cow/Nursing</u>	<u>Active Grazing Dates</u>
B.K. & M. Taylor	196	06/01 to 10/15
Tercero Corp.	806	06/01 to 10/15
R. & K. Fillmore	76	06/01 to 10/15

Recreation Activities – Recreational use of Slickrock Canyon is considered low. The Longneck Trail (#34017) parallels the river to the west and is in the river corridor. The Longneck Trail is located on the Dixie National Forest (Escalante Ranger District) and is a non-motorized pack and saddle trail that is considered a low use trail. There is no trail located adjacent to the river, however the area is used by hikers and backpacker. The steep winding canyon provides solitude and a primitive experience.

Other Resource Activities – None.

Special Designations – None

Socio-Economic Environment – The river segment is located within Garfield County. Boulder and Escalante are the two closest towns. Access to the area is provided by Highway 12 – an All-American Road. Slickrock Canyon flows from the Dixie National Forest onto the Grand Staircase-Escalante National Monument.

Garfield County is a largely rural county where traditional natural resource economic endeavors have dominated historically. In recent years, there has been a growth in recreation, tourism, and services. Much of this growth in recreation and tourism can be attributed to the designation of the Grand Staircase-Escalante National Monument in 1996. The county is struggling to retain rural traditions and lifestyles as well as “working” connections with the land. In the face of rising land values and globalization, traditional industries such as farming and ranching are becoming more difficult. Second home ownership has increased in the county dramatically. Over 60% of property tax notices in Garfield County are sent out of the county (39% out of state or country).

A recent visitor study of the Grand Staircase-Escalante National Monument indicates that approximately 600,000 people visit the area every year. While most of the visitors remain in the frontcountry visitor areas, exploration into the backcountry is increasing. Visitors come from throughout the United States and the world. About 14% of visitors are from Utah, 13% from California, 6% from Arizona, 5% from Colorado, and 10% from other western states. About 30% come from the other 39 states leaving 23% from other countries. The average visitor spends three days in the area. Only 20% of these visitors indicated that the Monument was their primary destination. Many of these visitors end up exploring the forest. The most common visitor activities reported were hiking, photography, scenic driving, and viewing natural features. Escalante and Bryce Canyon are the two most visited communities near the Monument. Boulder also experienced high visitation. The average amount spent by a group of three to the area was just under \$500. This means that more than \$20.6 million is being directly spent in Garfield and Kane counties because of the designated Monument. This is the equivalent of more than 430 full-time jobs. (A Front Country Visitor Study for the Grand Staircase-Escalante National Monument, Utah State University, Professional Report IORT PR2006-01, April 2006).

More specifically, trends and conditions:

Garfield County, the fifth largest county in the state has the highest percentage of federal land (over 90%) in a county in the state of Utah.¹⁹ The county contains over one million acres of National Forest System lands (including the Box-Death Hollow Wilderness Area) and large areas of other federal land, including portions of Grand Staircase-Escalante National Monument, Bryce Canyon National Park, Capitol Reef National Park, and Glen Canyon National Recreation Area. There are only about 170,000 acres of private land in the county. Public lands provide both challenges and opportunities for economic development in the county. The county is sparsely populated and is only projected to grow at a 1.0 percent annual rate between 2005 and 2050, a rate below the state average.

According to a 2003 Utah Bureau of Economic Analysis Report, Garfield County residents had one of the five lowest levels of total personal income in the state. Additionally, Garfield County had the second highest unemployment rate (10.8 percent) in the state according to 2003 Utah Department of Workforce Services information, exceeded only by Emery County's 11.0 percent unemployment rate. Slow job growth and unemployment are recurrent problems for the county. Traditionally, county residents have relied primarily upon ranching and timber. While there is a desire to retain these traditional sources of economic opportunity, services related to recreation and tourism are growing quickly in the county (*People and the Forests* 2003). Services are projected to increase from a 30.1 percent share in the Garfield County economy in 2005 to a 37.8 percent share in 2030 (State of Utah 2003).

According to Garfield County, the growth in the recreation and tourism industries has not been strong enough to provide the economic growth that has been achieved in more diverse parts of the state (Bremner 2006).²⁰ While these services (mostly related to leisure and hospitality) represent the largest sector in the Garfield County economy, government jobs (the sector ranked second) make up a much higher percentage of payroll wages (State of Utah 2003). There is a perception that leisure and hospitality jobs will not pay as much as jobs in other more traditional sectors.²¹ According to Garfield County, "... Garfield County is struggling economically. Schools are showing declining enrollment, and additional natural resource based industries have been all but eliminated in the county. ... Garfield County is struggling and unless changes [in land management and opportunities] are made relatively soon, things will get tougher" (Bremner 2006). Also according to Garfield County Commissioner Maloy Dodds in testimony to Congress, "...most tourist-generated jobs generally are minimal skill, minimum wage jobs – not the kind that can support a family." Another important fact that the Commissioner noted, "Federal destination areas [are] a mixed blessing at best" for Garfield County because increased visitors can be a burden to the county in terms of increased cost of garbage and search and rescue operations (Testimony to House Resources Committee's Forest and Forest Health Subcommittee, June 15, 2005).

The closest communities to the river segment are Escalante and Boulder. Escalante is projected to grow from about 800 people in 2000 to about 1300 in 2050. Boulder is projected to grow from 180 in 2000 to around 300 in 2050.

²¹ In the book *Visions of the Grand Staircase-Escalante* (compiled at the time of the Grand Staircase-Escalante National Monument planning process in the 1990s), Gail Blattenberger and David Kiefer acknowledge, "[m]inimum wages plus tips at Ruby's Inn are what the locals [in Garfield County] envisage from the service industry, but high tech service enterprises are also viable given an investment in communications infrastructure." Blattenberger and Kiefer suggest that while based on past performance "economic well-being" is clearly an issue in Kane and Garfield counties, "[e]xtractive industries are not an optimal or even a viable solution to the economic situation in these counties." Furthermore, "change will certainly come to these economies" and be met with "resistance (because of) the desire for a land-based economy (which is) seen as crucial to the quality of life in the rural West." According to the authors, the key is to "find ways of preserving our land-based Western heritage and lifestyle (which are so important to rural residents) along with the natural treasures of the countryside." Roughly 10 years later, we seem to face the same conditions, trends, attitudes, fears, opportunities, and challenges (Blattenberger and Kiefer 1998).

The river segment and the areas below Highway 12 are also used regularly by residents of Wayne County. Wayne County has the second highest percentage of federal land of any county in the state. The county contains about 160,000 acres of National Forest System lands. The county contains the second fewest acres of private land in the state, trailing only Daggett County (which is four times smaller than Wayne County) by about 8,000 acres. From 2004 to 2005, Wayne County was only one of three counties to register negative population growth. The county had a -0.6% annual growth rate, the lowest in the State (State of Utah 2006). However, from 2005 to 2050, the county is projected to almost double in population and grow at a 1.2 percent annual growth rate (State of Utah 2005).

Education and health services is the largest sector in the Wayne County economy. This sector is buoyed by the presence of Aspen Health Services' Aspen Achievement Academy, a wilderness therapy program that is a major county employer. Headquartered in Loa, the program operates on BLM and Forest Service lands. Government is the second largest sector in the county. Since 1980 agriculture has decreased dramatically and services have increased, a trend that is projected to continue into 2030. In 1980, agriculture made up 26.9 percent of the economy, while services took only a 3.5 percent share. By 2002, agriculture had declined to 13.8 percent and services had increased to 24.9 percent. In 2030, *People and the Forests* projects that agriculture will take a 6.5 percent share, while services will have increased to 30.3 percent (State of Utah 2003). This increase is visible in the increasingly popular tourist venue of Torrey at the gateway to Capitol Reef National Park.

While agriculture continues to decline, it is an important part of the county's traditions and customs. Many county residents work multiple jobs to keep the traditions of the past alive. The Wayne County General Plan identifies tourism promotion as an important economic development tool; however, there is concern over preserving quality of life while implementing this strategy.

Wayne County continues to struggle with issues of poverty. The county's 1999 poverty rate exceeded 15 percent, almost one and one-half times the state average (State of Utah 2003). Total personal income in Wayne County is the fourth lowest in the state. Growth rates of total personal income were second to last in the state from 2000 to 2003 (Bureau of Economic Analysis 2003).

Teasdale, Grover, and Torrey are the closest towns in Wayne County to the river segment. Torrey has a population of 171 (2005). None of the communities in Wayne County are expected to grow rapidly.

Current Administration and Funding Needs if Designated – The current administering agency is the USFS. U.S. Forest Service and BLM would share management of the segment.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

There has been no demonstrated or potential commitment to share preservation and/or administration.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with

protection of river values.

Not applicable, as all of the land through which the segment flows is federally owned.

(3) Support or opposition to designation.

Garfield County is working on a Resource Management Plan for all lands in the county. They have included an analysis of Wild and Scenic Rivers in their discussions. While their RMP supports the designation of Cataract Canyon (Colorado River) and the Dirty Devil River as Wild and Scenic Rivers, the county does not support the designation of Slickrock Canyon.

During the Dixie and Fishlake National Forests eligibility process, the county expressed repeated concern over the eligibility determinations made for this and other river segments on the Escalante Ranger District. The county does not believe that the Escalante River system is suitable because its flow is too regulated by irrigators.

When representatives of the Forest met with staff from the Navajo Nation and Hopi Nation in July 2006, the Tribes indicated that they favored “preservation” of forest resources including Wild and Scenic Rivers. No official communications from the Tribes confirming this support has been received.

In response to scoping, a non-profit organization expressed support for designation because of the segment’s contribution to river system integrity.

Comment letters on the DEIS received were generally opposed to designation. An exception would be the Grand Canyon Trust, who supports the suitability of Slickrock Canyon (it is assumed this includes the FS segment) along with a list other eligible segments on adjacent Forests.

Allen Rowley (Fishlake NF Supervisor) has recently spoken with the BLM Manager of the Grand Staircase-Escalante National Monument relative to suitability of this segment on FS lands, and has not yet received any indication of support or opposition.

None of the three organized campaigns supported a positive suitability finding for this segment.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Downstream from the Forest Service boundary, the BLM found Slickrock Canyon to be suitable for designation because “high quality scenery, recreational values, prehistoric sites, and riparian areas make this a worthy addition to the WSR system” (Appendix 11, GSENM FEIS Monument Plan).

The Dixie National Forest, Glen Canyon National Recreation Area, Bryce Canyon National Park, and GSENM all worked together on eligibility for this river segment. Final determinations of suitability were reserved for individual agencies to make on their own.

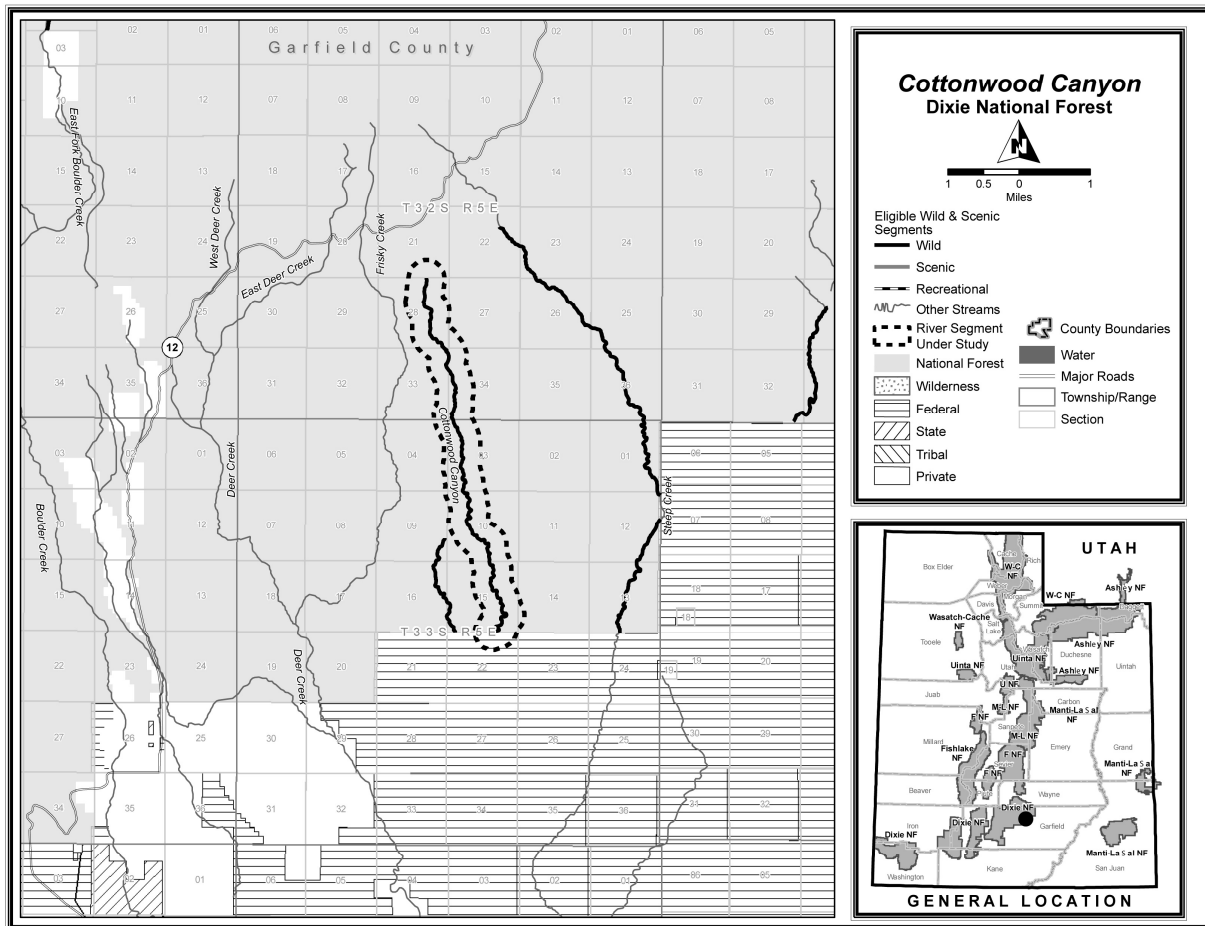
(5) Contribution to river system or basin integrity.

Slickrock Canyon does not contribute significantly to the flow of the Escalante River. The segment within the GSENM has been found suitable for designation.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

No commitment has been expressed.

Cottonwood Canyon Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Cottonwood Canyon

River Mileage:

Studied: 10.7 miles, from headwaters to Lower Deer Creek (T 34S, R 5E, Sect. 4)

Eligible: 6.3 miles, from headwaters to forest boundary

Location:

Cottonwood Canyon	Dixie National Forest administered by the Fishlake National Forest, Fremont River Ranger District, Garfield County, Utah		Congressional District 2	
	Start	End	Classification	Miles
Segment 1	SW ¼ SE ¼ Sect. 21, T 32S, R 5E, SLM	SW ¼ SE ¼ Sect. 15, T 33S, R 5E, SLM	Wild	6.3

Physical Description of River:

Cottonwood Canyon is located on the Fremont River Ranger District below Highway 12. Lower reaches are dominated by slickrock and ledges with pinyon and juniper trees transitioning to ponderosa pine. Upper regions just below Highway 12 hold aspen and conifer in areas with deeper soils. This stream is intermittent.

ELIGIBILITY

Name and Date of Eligibility Document: Appendix 4, Wild and Scenic River Eligibility, Grand Staircase Escalante National Monument, 1998.

Determination of Free-flow: There are no known diversions, impoundments, or other channel modifications of Cottonwood Canyon on National Forest System lands.

Summary of Outstandingly Remarkable Values (ORV):

Scenic – In common with other segments in this landscape, the area offers dramatic contrasts of color, texture, and slope which are unique to southern Utah redrock country. As the segment leaves the GSEM and extends into the Fishlake National Forest it becomes broader and loses some of the narrowness and dramatic contrasts found on the lower stretches.

Recreational – The area near the upper segment of the corridor located within the Fishlake National Forest may be accessed via the Long Neck Trail (#34017) or more readily at Highway 12 at its headwaters. The canyon itself receives a low-level of use by hikers and backpackers. Portions of the canyon adjacent to the Monument which are steep and winding provide increased solitude and more opportunity for primitive experience.

Cultural – The area has been used intermittently by Native Americans and pioneers.

This stream was determined to be eligible by an interagency study headed by the Grand Staircase Escalante National Monument in 1998.

CLASSIFICATION

Basis for the Classification of River: Wild

There are no roads present in the river corridor. There is access to the headwaters via a non-motorized trail. There is also a non-motorized trail that parallels the river to the west that is located within the corridor, but is not related to recreational use of the river.

SUITABILITY REPORT

Landownership and Land Uses – The eligible river corridor is a 6.3 mile-long river segment and encompasses 1,866 acres, and is entirely on National Forest System (NFS) lands administered by the Fishlake National Forest.

River Mile	Ownership	Acres
0 – 6.3	Fishlake National Forest (Fremont River RD)	1866

The stream corridor is within Management Area 2A# (MA-2A#) according to the Dixie National Forest Plan. MA-2A# has a management emphasis on semi-primitive recreation opportunities with a “no surface occupancy” stipulation for mineral entry. The area provides multiple uses.

Mineral and Energy Resource Activities – There are no existing salable, locatable, or leasable mineral and energy resources development in the eligible segment.

Cottonwood Canyon is located in the Long Neck Mesa/Steep Creek/Oak Creek Roadless Area. According to the Dixie National Forest Roadless Area Minerals Evaluation the potential for this area is as follows:

Oil and Gas: Currently there are no producing wells or fields in this area. It has been only lightly explored. There are no leases, but industry has expressed interest in this general area. Expressions of

Interest have been made for the area immediately to the northeast.

Oil potential associated with four possible plays (Late Proterozoic/Cambrian, Devonian-Pennsylvanian, Late Paleozoic, and Permo-Triassic Unconformity) is ranked as moderate to high (low certainty) along the eastern and southern portions of the Teasdale and Escalante Ranger Districts. Petroleum development potential is ranked by the UGS as low-moderate with the highest potential relative to the Devonian-Pennsylvanian and Permo-Triassic Plays. If leases are issued, exploratory drilling could occur. A total of 32 new exploratory wells are reasonably foreseeable for the Forest in the next 15 years. Of this total, only a couple of these would probably occur in this area. If a discovery were made, additional development wells could be drilled.

Jurassic sediments (Navajo Sandstone and Carmel Formation) are exposed in the area, however this area is not prospective for natural gas/methane due to the close proximity to the volcanic rocks of Boulder Mountain immediately to the west as well as uplift and erosion of known source/reservoir Cretaceous sedimentary rocks.

Carbon Dioxide: Moderate potential for occurrence (low certainty). Development potential is low-none because there is no market.

Geothermal: Occurrence potential is unknown due to the lack of identified thermal wells and springs. Due to the lack of known geothermal springs and wells and overall information, the development potential is considered low.

Coal: There are no known coal deposits in this area

Locatable Minerals: There are no known valuable deposits of base or precious metals or other locatable minerals. Development potential is low.

Common Variety: Sandstone, limestone and other sedimentary rocks in the area could be developed for decorative stone or building stone. Colluvium consisting of displaced sedimentary rocks and volcanic rock transported from Boulder Mountain could be developed for riprap, decorative stone, and building stone. Development potential is considered moderate, most likely on a small scale, localized basis.

References:

Utah Geological Survey, 2004, The Oil, Gas, Coalbed Gas, Carbon Dioxide and Geothermal Resources of the Fishlake National Forest, Southwestern Utah, April 30, 2004.

Doelling, H.H., 1972. Southwestern Utah Coal Fields: Alton, Kaiparowits Plateau and Kolob-Harmony. Utah Geological and Mineralogical Survey, Monograph Series No. 1, 1972.

Water Resources Development – There are no known existing water developments (dams, diversions or channel modifications) on this segment. There are no historic, current, or known planned Federal Energy Regulatory Commission permits or license applications for this corridor. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – The Slickrock Trail (#35120) provides access to the river's headwaters and is located in the river corridor. This non-motorized trail is 24 miles long and receives low to moderate use. The Longneck Trail (#34017) parallels the river to the west and enters the river corridor approximately 1.5 mile south of the headwaters (sect. 33, T 32S, R 5E and sect. 4, T 33S, R 5E, SLM). The Longneck Trail is located on the Dixie National Forest (Escalante Ranger District) and is a non-motorized pack and saddle trail that is considered a low use trail.

There is a section of cattle fencing that extends 600 feet into the river corridor, but does not bisect the river.

There are no other facilities and/or other developments located in the river corridor. Cottonwood Canyon river corridor is entirely located in the Long Neck Mesa/Steep Creek/Oak Creek Inventoried Roadless Area.

Grazing Activities – The river segment is located within the Oak Creek Allotment. The Oak Creek Allotment consists of 72,712 acres and is an active allotment with three permittees. There is a section of cattle fencing that extends 600 feet into the river corridor, but does not bisect the river.

Oak Creek Allotment		
<u>Permittee Name</u>	<u>Number of mature cow/Nursing</u>	<u>Active Grazing Dates</u>
B.K. & M. Taylor	196	06/01 to 10/15
Tercero Corp.	806	06/01 to 10/15
R. & K. Fillmore	76	06/01 to 10/15

Recreation Activities – Recreational use of Cottonwood Canyon is considered low. The Slickrock Trail (#35120) provides access to the river corridor is considered a low use trail, but does receive use for grazing administration and stock and hiking recreation. The Longneck Trail (#34017) parallels the river to the west and enters the river corridor approximately 1.5 mile south of the headwaters (sect. 33, T 32S, R 5E and sect. 4, T 33S, R 5E, SLM). The Longneck Trail is located on the Dixie National Forest (Escalante Ranger District) and is a non-motorized pack and saddle trail that is considered a low use trail. There is no trail located adjacent to the river, however the area is used by hikers and backpacker. The steep winding canyon provides solitude and a primitive experience.

Other Resource Activities – The upper one mile of Cottonwood Canyon corridor contains some aspen stands. Forest managers may work to regenerate aspen in this area through the use of prescribed fire among other tools.

Special Designations – None

Socio-Economic Environment – The river segment is located within Garfield County. Boulder and Escalante are the two closest towns. Access to the area is provided by Highway 12 – an All-American Road. Cottonwood Canyon flows from the Dixie National Forest onto the Grand Staircase-Escalante National Monument.

Garfield County is a largely rural county where traditional natural resource economic endeavors have dominated historically. In recent years, there has been a growth in recreation, tourism, and services. Much of this growth in recreation and tourism can be attributed to the designation of the Grand Staircase-Escalante National Monument in 1996. The county is struggling to retain rural traditions and lifestyles as well as “working” connections with the land. In the face of rising land values and globalization, traditional industries such as farming and ranching are becoming more difficult. Second home ownership has increased in the county dramatically. Over 60% of property tax notices in Garfield County are sent out of the county (39% out of state or country). Educating these occasional land users about special values and proper use is becoming more difficult.

A recent visitor study of the Grand Staircase-Escalante National Monument indicates that approximately 600,000 people visit the area every year. While most of the visitors remain in the frontcountry visitor areas, exploration into the backcountry is increasing. Visitors come from throughout the United States and the world. About 14% of visitors are from Utah, 13% from California, 6% from Arizona, 5% from Colorado, and 10% from other western states. About 30% come from the other 39 states leaving 23% from other countries. The average visitor spends three days in the area. Only 20% of these visitors indicated that the Monument was their primary destination. Many of these visitors end up exploring the forest. The most common reported visitor activities were hiking, photography, scenic driving, and viewing natural features. Escalante and Bryce Canyon are the two most visited communities near the

Monument. Boulder also experienced high visitation. The average amount spent by a group of three to the area was just under \$500. This means that more than \$20.6 million is being directly spent in Garfield and Kane counties because of the designated Monument. This is the equivalent of more than 430 full-time jobs. (A Front Country Visitor Study for the Grand Staircase-Escalante National Monument, Utah State University, Professional Report IORT PR2006-01, April 2006).

More specifically, trends and conditions:

Garfield County, the fifth largest county in the state has the highest percentage of federal land (over 90%) in a county in the state of Utah.²² The county contains over one million acres of National Forest System lands (including the Box-Death Hollow Wilderness Area) and large areas of other federal land, including portions of Grand Staircase-Escalante National Monument, Bryce Canyon National Park, Capitol Reef National Park, and Glen Canyon National Recreation Area. There are only about 170,000 acres of private land in the county. Public lands provide both challenges and opportunities for economic development in the county. The county is sparsely populated and is only projected to grow at a 1.0 percent annual rate between 2005 and 2050, a rate below the state average.

According to a 2003 Utah Bureau of Economic Analysis Report, Garfield County residents had one of the five lowest levels of total personal income in the state. Additionally, Garfield County had the second highest unemployment rate (10.8 percent) in the state according to 2003 Utah Department of Workforce Services information, exceeded only by Emery County's 11.0 percent unemployment rate. Slow job growth and unemployment are recurrent problems for the county. Traditionally, county residents have relied primarily upon ranching and timber. While there is a desire to retain these traditional sources of economic opportunity, services related to recreation and tourism are growing quickly in the county (*People and the Forests* 2003). Services are projected to increase from a 30.1 percent share in the Garfield County economy in 2005 to a 37.8 percent share in 2030 (State of Utah 2003).

According to Garfield County, the growth in the recreation and tourism industries has not been strong enough to provide the economic growth that has been achieved in more diverse parts of the state (Bremner 2006).²³ While these services (mostly related to leisure and hospitality) represent the largest sector in the Garfield County economy, government jobs (the sector ranked second) make up a much higher percentage of payroll wages (State of Utah 2003). There is a perception that leisure and hospitality jobs will not pay as much as jobs in other more traditional sectors.²⁴ According to Garfield County, "... Garfield County is struggling economically. Schools are showing declining enrollment, and additional natural resource based industries have been all but eliminated in the county. ... Garfield County is struggling and unless changes [in land management and opportunities] are made relatively soon, things will get tougher" (Bremner 2006). Also according to Garfield County Commissioner Maloy Dodds in testimony to Congress, "...most tourist-generated jobs generally are minimal skill, minimum wage jobs – not the kind that can support a family." Another important fact that the Commissioner noted, "Federal destination areas [are] a mixed blessing at best" for Garfield County because increased visitors can be a burden to the county in terms of increased cost of garbage and search and rescue operations (Testimony to House Resources Committee's Forest and Forest Health Subcommittee, June 15, 2005).

²⁴ In the book *Visions of the Grand Staircase-Escalante* (compiled at the time of the Grand Staircase-Escalante National Monument planning process in the 1990s), Gail Blattenberger and David Kiefer acknowledge, "[m]inimum wages plus tips at Ruby's Inn are what the locals [in Garfield County] envisage from the service industry, but high tech service enterprises are also viable given an investment in communications infrastructure." Blattenberger and Kiefer suggest that while based on past performance "economic well-being" is clearly an issue in Kane and Garfield counties, "[e]xtractive industries are not an optimal or even a viable solution to the economic situation in these counties." Furthermore, "change will certainly come to these economies" and be met with "resistance (because of) the desire for a land-based economy (which is) seen as crucial to the quality of life in the rural West." According to the authors, the key is to "find ways of preserving our land-based Western heritage and lifestyle (which are so important to rural residents) along with the natural treasures of the countryside." Roughly 10 years later, we seem to face the same conditions, trends, attitudes, fears, opportunities, and challenges (Blattenberger and Kiefer 1998).

The closest communities to the river segment are Escalante and Boulder. Escalante is projected to grow from about 800 people in 2000 to about 1300 in 2050. Boulder is projected to grow from 180 in 2000 to around 300 in 2050.

The river segment and the areas below Highway 12 are also used regularly by residents of Wayne County. Wayne County has the second highest percentage of federal land of any county in the state. The county contains about 160,000 acres of National Forest System lands. The county contains the second fewest acres of private land in the state, trailing only Daggett County (which is four times smaller than Wayne County) by about 8,000 acres. From 2004 to 2005, Wayne County was only one of three counties to register negative population growth. The county had a -0.6% annual growth rate (the lowest in the State) (State of Utah 2006). However, from 2005 to 2050, the county is projected to almost double in population and grow at a 1.2 percent annual growth rate (State of Utah 2005).

Education and health services is the largest sector in the Wayne County economy. This sector is buoyed by the presence of Aspen Health Services' Aspen Achievement Academy, a wilderness therapy program that is a major county employer. Headquartered in Loa, the program operates on BLM and Forest Service lands. Government is the second largest sector in the county. Since 1980 agriculture has decreased dramatically and services have increased, a trend that is projected to continue into 2030. In 1980, agriculture made up 26.9 percent of the economy, while services took only a 3.5 percent share. By 2002, agriculture had declined to 13.8 percent and services had increased to 24.9 percent. In 2030, *People and the Forests* projects that agriculture will take a 6.5 percent share, while services will have increased to 30.3 percent (State of Utah 2003). This increase is visible in the increasingly popular tourist venue of Torrey at the gateway to Capitol Reef National Park.

While agriculture continues to decline, it is an important part of the county's traditions and customs. Many county residents work multiple jobs to keep the traditions of the past alive. The Wayne County General Plan identifies tourism promotion as an important economic development tool; however, there is concern over preserving quality of life while implementing this strategy.

Wayne County continues to struggle with issues of poverty. The county's 1999 poverty rate exceeded 15 percent, almost one and one-half times the state average (State of Utah 2003). Total personal income in Wayne County is the fourth lowest in the state. Growth rates of total personal income were second to last in the state from 2000 to 2003 (Bureau of Economic Analysis 2003).

Teasdale, Grover, and Torrey are the closest towns in Wayne County to the river segment. Torrey has a population of 171 (2005). None of the communities in Wayne County are expected to grow rapidly.

Current Administration and Funding Needs if Designated – The current administering agency is the USFS, Fishlake National Forest. U.S. Forest Service and BLM would share management of the segment.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

There has been no demonstrated or potential commitment to share preservation and/or administration.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Not applicable, as all of the land is federally owned.

(3) Support or opposition to designation.

Garfield County is working on a Resource Management Plan for all lands in the county. They have included an analysis of Wild and Scenic Rivers in their discussions. While their RMP supports the designation of Cataract Canyon (Colorado River) and the Dirty Devil River as Wild and Scenic Rivers, the county does not support the designation of Cottonwood Canyon.

During the Dixie and Fishlake National Forests eligibility process, the county expressed repeated concern over the eligibility determinations made for this and other river segments on the Escalante Ranger District. The county does not believe that the Escalante River system is suitable because its flow is too regulated by irrigators.

When representatives of the Forest met with staff from the Navajo Nation and Hopi Nation in July 2006, the Tribes indicated that they favored "preservation" of forest resources including Wild and Scenic Rivers. No official communications from the Tribes confirming this support has been received.

In response to scoping, a non-profit organization expressed support for designation because of the segment's contribution to river system integrity.

Comment letters received were generally opposed to designation. An exception would be the Grand Canyon Trust, who supports the suitability of Cottonwood Canyon (it is assumed this includes the FS segment) along with a list other eligible segments on adjacent Forests. None of the three organized campaigns supported a positive suitability finding for this segment.

Allen Rowley (Fishlake NF Supervisor) has recently spoken with the BLM Manager of the Grand Staircase-Escalante National Monument relative to suitability of this segment on FS lands, and has not yet received any indication of support or opposition.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Downstream from the Forest Service boundary, the BLM found Cottonwood Canyon to be not suitable for designation because "the quality of the river characteristics in this segment would not significantly enhance nor contribute to the NWSRS" (Appendix 11, GSENM FEIS Monument Plan). In the DEIS, the GSENM indicated "although this canyon exhibits high quality scenery and has recreational use, it is not deemed to be the best of the best" (Appendix 5, GSENM DEIS Monument Plan).

The Dixie National Forest, Glen Canyon National Recreation Area, Bryce Canyon National Park, and GSENM all worked together on eligibility for this river segment. Final determinations of suitability were reserved for individual agencies to make on their own.

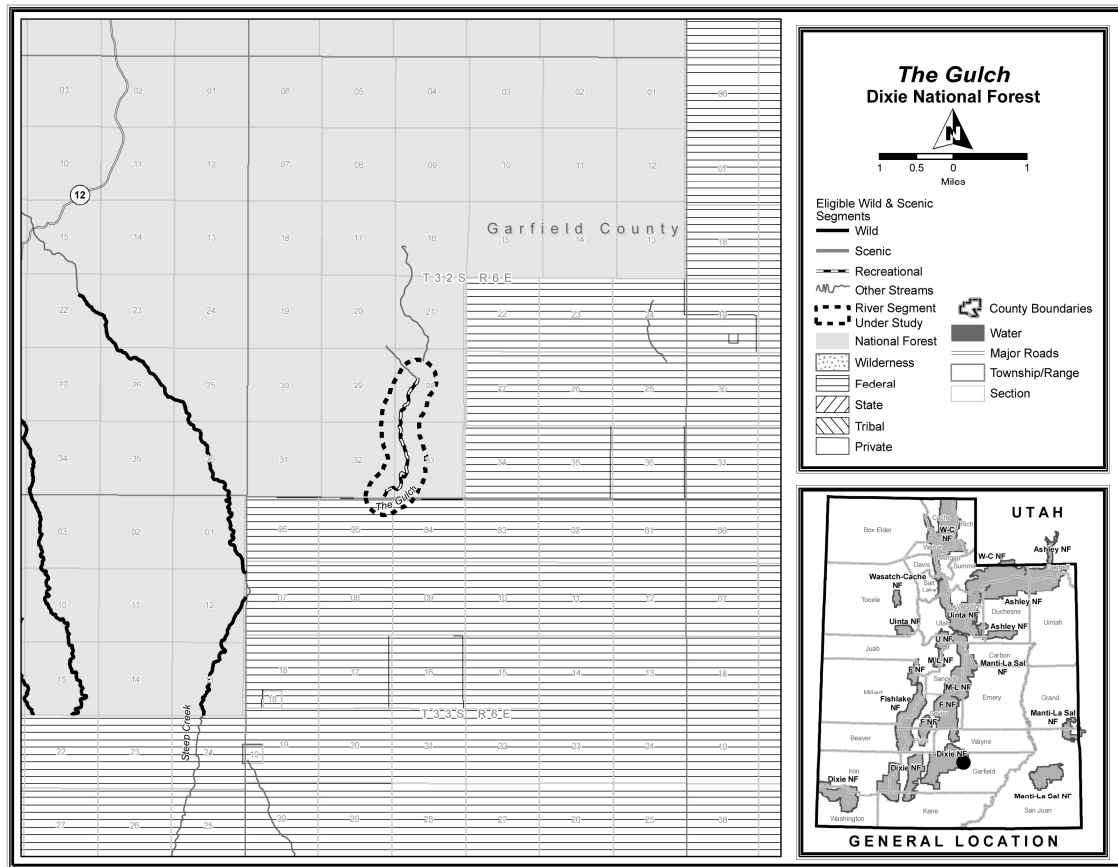
(5) Contribution to river system or basin integrity.

Cottonwood Canyon does not contribute significantly to the flow of the Escalante River. The segment within the GSENM was not found to be suitable for designation.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

No commitment has been expressed.

The Gulch Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: The Gulch

River Mileage:

Studied: 26.7 miles, from headwaters to Escalante River

Eligible: 2.1 miles, from headwaters (confluence with Stair Canyon) to Forest boundary

Location:

The Gulch	Dixie National Forest administered by the Fishlake National Forest, Fremont River Ranger District, Garfield County, Utah		Congressional District 2	
	Start	End	Classification	Miles
Segment 1	SE ¼ NW ¼ Sect. 28, T 32S, R 6E, SLM	SE ¼ SE ¼ Sect. 33, T 32S, R 6E, SLM	Recreational	2.1

Physical Description of River:

The Gulch, a perennial stream, is located on the Fremont River Ranger District below Highway 12. Lower reaches are dominated by slickrock and ledges with pinyon and juniper trees transitioning to ponderosa pine.

ELIGIBILITY

Name and Date of Eligibility Document: Appendix 4, Wild and Scenic River Eligibility, Grand Staircase Escalante National Monument (GSENM), 1998.

Determination of Free-flow: There are no known diversions, impoundments, or other channel modifications of The Gulch on National Forest System lands.

Summary of Outstandingly Remarkable Values (ORV):

Scenic – As is common to adjoining segments of this and other similar drainages in the surrounding landscape, the area offers dramatic contrasts of color, texture, and slope. This relatively short segment (2.1 miles) of riparian corridor from the confluence with Stair Canyon to the Forest boundary down stream is paralleled by Forest roads (#147 and #023) for its entire length. Associated human related activity is apparent. The gulch is nearly a mile wide at the Forest boundary with few features that compare with other segments down stream on the GSEM lands.

Recreational – The area receives a low-level of use by hikers and backpackers, and is readily accessible to the motorized public via the Burr Trail Road from the town of Boulder which feeds the Forest roads which directly access the bottom of the Gulch itself. There is a moderate amount of solitude and some relative primitive experience available, perhaps in some of the side canyons, given the isolation or distance of travel to this area by motorized vehicle.

Cultural – The area has been used intermittently by Native Americans and pioneers.

This stream was determined to be eligible by an interagency study headed by the Grand Staircase Escalante National Monument in 1998.

CLASSIFICATION

Basis for the Classification of River: Recreational

There are approximately two miles of motorized four-wheel-drive route along The Gulch to the Forest boundary, therefore it was necessary to change the classification from Wild to Recreational due to the presence of a road within the stream corridor (does not meet classification criteria for a Wild river).

SUITABILITY REPORT

Landownership and Land Uses – The eligible river corridor is a 2.1 mile-long river segment and encompasses about 663.62 acres, and is entirely on National Forest System (NFS) lands administered by the Fishlake National Forest.

River Mile	Ownership	Acres
0 – 2.1	Fishlake National Forest (Fremont River Ranger District)	664
	Total	664

The stream corridor is within Management Area 2A (MA-2A) according to the Dixie National Forest Plan. MA-2A# has a management emphasis on semi-primitive recreation opportunities. The area provides multiple uses.

Mineral and Energy Resource Activities – There are no existing salable, locatable, or leasable mineral and energy resources development in the eligible segment.

The Gulch is located in the Long Neck Mesa/Steep Creek/Oak Creek Roadless Area. According to the Dixie National Forest Roadless Area Minerals Evaluation the potential for this area was as follows:

Oil and Gas: Currently there are no producing wells or fields in this area. It has been only lightly explored. There are no leases, but industry has expressed interest in this general area. Expressions of Interest have been made for the area immediately to the northeast.

Oil potential associated with four possible plays (Late Proterozoic/Cambrian, Devonian-Pennsylvanian, Late Paleozoic, and Permo-Triassic Unconformity) is ranked as moderate to high (low certainty) along the eastern and southern portions of the Teasdale and Escalante Ranger Districts. Petroleum development potential is ranked by the UGS as low-moderate with the highest potential relative to the Devonian-Pennsylvanian and Permo-Triassic Plays. If leases are issued, exploratory drilling could occur. A total of 32 new exploratory wells are reasonably foreseeable for the Forest in the next 15 years. Of this total, only a couple of these would probably occur in this area. If a discovery were made, additional development wells could be drilled.

Jurassic sediments (Navajo Sandstone and Carmel Formation) are exposed in the area, however this area is not prospective for natural gas/methane due to the close proximity to the volcanic rocks of Boulder Mountain immediately to the west as well as uplift and erosion of known source/reservoir Cretaceous sedimentary rocks.

Carbon Dioxide: Moderate potential for occurrence (low certainty). Development potential is low-none because there is no market.

Geothermal: Occurrence potential is unknown due to the lack of identified thermal wells and springs. Due to the lack of known geothermal springs and wells and overall information, the development potential is considered low.

Coal: There are no known coal deposits in this area

Locatable Minerals: There are no known valuable deposits of base or precious metals or other locatable minerals. Development potential is low.

Common Variety: Sandstone, limestone and other sedimentary rocks in the area could be developed for decorative stone or building stone. Colluvium consisting of displaced sedimentary rocks and volcanic rock transported from Boulder Mountain could be developed for riprap, decorative stone, and building stone. Development potential is considered moderate, most likely on a small scale, localized basis.

References:

Utah Geological Survey, 2004, The Oil, Gas, Coalbed Gas, Carbon Dioxide and Geothermal Resources of the Fishlake National Forest, Southwestern Utah, April 30, 2004.

Doelling, H.H., 1972. Southwestern Utah Coal Fields: Alton, Kaiparowits Plateau and Kolob-Harmony. Utah Geological and Mineralogical Survey, Monograph Series No. 1, 1972.

Water Resources Development – There are no historic, current, or known planned Federal Energy Regulatory Commission permits or license applications for this corridor. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – Forest Service Roads #31473 and #30023 provide access to the river and are located in the river corridor. FS Road #30023 intersects road #31473 adjacent to river and then turns south, following the river, and dead-ends at the Forest boundary. FS Road #31473 begins at the junction with FS Road #30023, travels north along the river for approximately 1

mile, turns and heads west for approximately 0.5 miles, and then dead-ends into a non-system non-motorized trail. The non-system non-motorized trail eventually turns into the Indian Trail Bench (#35126) Trail that terminates at Roundup Flat.

There are no facilities and/or other developments. The Gulch river corridor is entirely located in the Long Neck Mesa/Steep Creek/Oak Creek Inventoried Roadless Area.

Grazing Activities – The river segment is located within the Oak Creek Allotment. The Oak Creek Allotment consists of 72,712 acres and is an active allotment with three permittees.

Oak Creek Allotment		
<u>Permittee Name</u>	<u>Number of mature cow/Nursing</u>	<u>Active Grazing Dates</u>
B.K. & M. Taylor	196	06/01 to 10/15
Tercero Corp.	806	06/01 to 10/15
R. & K. Fillmore	76	06/01 to 10/15

Recreation Activities – Recreational use of The Gulch drainage is considered low to moderate. Currently FS Roads #31473 and #30023, and trail #35126 receive low to moderate ATV/OHV use. The non-system trail that access that connect FS Road #31473 and FS Trail #35126 is considered a low use trail, but does receive use for grazing administration and stock and hiking recreation.

Other Resource Activities – None

Special Designations – None

Socio-Economic Environment – The river segment is located within Garfield County. Boulder and Escalante are the two closest towns. Access to the area is provided by Highway 12 – an All-American Road and the Burr Trail road. The Gulch flows from the Dixie National Forest onto the Grand Staircase-Escalante National Monument.

Garfield County is a largely rural county where traditional natural resource economic endeavors have dominated historically. In recent years, there has been a growth in recreation, tourism, and services. Much of this growth in recreation and tourism can be attributed to the designation of the Grand Staircase-Escalante National Monument in 1996. The county is struggling to retain rural traditions and lifestyles as well as “working” connections with the land. In the face of rising land values and globalization, traditional industries such as farming and ranching are becoming more difficult. Second home ownership has increased in the county dramatically. Over 60% of property tax notices in Garfield County are sent out of the county (39% out of state or country).

A recent visitor study of the Grand Staircase-Escalante National Monument indicates that approximately 600,000 people visit the area every year. While most of the visitors remain in the frontcountry visitor areas, exploration into the backcountry is increasing. Visitors come from throughout the United States and the world. About 14% of visitors are from Utah, 13% from California, 6% from Arizona, 5% from Colorado, and 10% from other western states. About 30% come from the other 39 states leaving 23% from other countries. The average visitor spends three days in the area. Only 20% of these visitors indicated that the Monument was their primary destination. Many of these visitors end up exploring the forest. The most common visitor activities reported were hiking, photography, scenic driving, and viewing natural features. Escalante and Bryce Canyon are the two most visited communities near the Monument. Boulder also experienced high visitation. The average amount spent by a group of three to the area was just under \$500. This means that more than \$20.6 million is being directly spent in Garfield and Kane counties because of the designated Monument. This is the equivalent of more than 430 full-

time jobs. (A Front Country Visitor Study for the Grand Staircase-Escalante National Monument, Utah State University, Professional Report IORT PR2006-01, April 2006).

More specifically, trends and conditions:

Garfield County, the fifth largest county in the state has the highest percentage of federal land (over 90%) in a county in the state of Utah.²⁵ The county contains over one million acres of National Forest System lands (including the Box-Death Hollow Wilderness Area) and large areas of other federal land, including portions of Grand Staircase-Escalante National Monument, Bryce Canyon National Park, Capitol Reef National Park, and Glen Canyon National Recreation Area. There are only about 170,000 acres of private land in the county. Public lands provide both challenges and opportunities for economic development in the county. The county is sparsely populated and is only projected to grow at a 1.0 percent rate annually between 2005 and 2050, a rate below the state average.

According to a 2003 Utah Bureau of Economic Analysis Report, Garfield County residents had one of the five lowest levels of total personal income in the state. Additionally, Garfield County had the second highest unemployment rate (10.8 percent) in the state according to 2003 Utah Department of Workforce Services information, exceeded only by Emery County's 11.0 percent unemployment rate. Slow job growth and unemployment are recurrent problems for the county. Traditionally, county residents have relied primarily upon ranching and timber. While there is a desire to retain these traditional sources of economic opportunity, services related to recreation and tourism are growing quickly in the county (*People and the Forests*, 2003). Services are projected to increase from a 30.1 percent share in the Garfield County economy in 2005 to a 37.8 percent share in 2030 (State of Utah 2003).

According to Garfield County, the growth in the recreation and tourism industries has not been strong enough to provide the economic growth that has been achieved in more diverse parts of the state (Bremner 2006).²⁶ While these services (mostly related to leisure and hospitality) represent the largest sector in the Garfield County economy, government jobs (the sector ranked second) make up a much higher percentage of payroll wages (State of Utah 2003). There is a perception that leisure and hospitality jobs will not pay as much as jobs in other more traditional sectors.²⁷ According to Garfield County, "... Garfield County is struggling economically. Schools are showing declining enrollment, and additional natural resource based industries have been all but eliminated in the county. ... Garfield County is struggling and unless changes [in land management and opportunities] are made relatively soon, things will get tougher" (Bremner 2006). Also according to Garfield County Commissioner Maloy Dodds in testimony to Congress, "...most tourist-generated jobs generally are minimal skill, minimum wage jobs – not the kind that can support a family." Another important fact that the Commissioner noted, "Federal destination areas [are] a mixed blessing at best" for Garfield County because increased visitors can be a burden to the county in terms of increased cost of garbage and search and rescue operations (Testimony to House Resources Committee's Forest and Forest Health Subcommittee, June 15, 2005).

The closest communities to the river segment are Escalante and Boulder. Escalante is projected to grow

²⁷ In the book *Visions of the Grand Staircase-Escalante* (compiled at the time of the Grand Staircase-Escalante National Monument planning process in the 1990s), Gail Blattenberger and David Kiefer acknowledge, "[m]inimum wages plus tips at Ruby's Inn are what the locals [in Garfield County] envisage from the service industry, but high tech service enterprises are also viable given an investment in communications infrastructure." Blattenberger and Kiefer suggest that while based on past performance "economic well-being" is clearly an issue in Kane and Garfield counties, "[e]xtractive industries are not an optimal or even a viable solution to the economic situation in these counties." Furthermore, "change will certainly come to these economies" and be met with "resistance (because of) the desire for a land-based economy (which is) seen as crucial to the quality of life in the rural West." According to the authors, the key is to "find ways of preserving our land-based Western heritage and lifestyle (which are so important to rural residents) along with the natural treasures of the countryside." Roughly 10 years later, we seem to face the same conditions, trends, attitudes, fears, opportunities, and challenges (Blattenberger and Kiefer 1998).

from about 800 people in 2000 to about 1300 in 2050. Boulder is projected to grow from 180 in 2000 to around 300 in 2050.

The river segment and the areas below Highway 12 are also used regularly by residents of Wayne County. Wayne County has the second highest percentage of federal land of any county in the state. The county contains about 160,000 acres of National Forest System lands. The county contains the second fewest acres of private land in the state, trailing only Daggett County (which is four times smaller than Wayne County) by about 8,000 acres. From 2004 to 2005, Wayne County was only one of three counties to register negative population growth. The county had a -0.6% annual growth rate (the lowest in the State) (State of Utah 2006). However, from 2005 to 2050, the county is projected to nearly double in population and grow at a 1.2 percent annual growth rate (State of Utah 2005).

Education and health services is the largest sector in the Wayne County economy. This sector is buoyed by the presence of Aspen Health Services' Aspen Achievement Academy, a wilderness therapy program that is a major county employer. Headquartered in Loa, the program operates on BLM and Forest Service lands. Government is the second largest sector in the county. Since 1980 agriculture has decreased dramatically and services have increased, a trend that is projected to continue into 2030. In 1980, agriculture made up 26.9 percent of the economy, while services took only a 3.5 percent share. By 2002, agriculture had declined to 13.8 percent and services had increased to 24.9 percent. In 2030, *People and the Forests* projects that agriculture will take a 6.5 percent share, while services will have increased to 30.3 percent (State of Utah 2003). This increase is visible in the increasingly popular tourist venues of Torrey at the gateway to Capitol Reef National Park.

While agriculture continues to decline, it is an important part of the county's traditions and customs. Many county residents work multiple jobs to keep the traditions of the past alive. The Wayne County General Plan identifies tourism promotion as an important economic development tool; however, there is concern over preserving quality of life while implementing this strategy.

Wayne County continues to struggle with issues of poverty. The county's 1999 poverty rate exceeded 15 percent, almost one and one-half times the state average (State of Utah 2003). Total personal income in Wayne County is the fourth lowest in the state. Growth rates of total personal income were second to last in the state from 2000 to 2003 (Bureau of Economic Analysis 2003).

Teasdale, Grover, and Torrey are the closest towns in Wayne County to the river segment. Torrey has a population of 171 (2005). None of the communities in Wayne County are expected to grow rapidly.

Current Administration and Funding Needs if Designated – The current administering agency is the USFS. The U.S. Forest Service and BLM would share management of the segment.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

There has been no demonstrated or potential commitment to share preservation and/or administration.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Not applicable, as all of the land through which the segment flows is federally owned.

(3) Support or opposition to designation.

Garfield County is working on a Resource Management Plan for all lands in the county. They have included an analysis of Wild and Scenic Rivers in their discussions. While their RMP supports the designation of Cataract Canyon (Colorado River) and the Dirty Devil River as Wild and Scenic Rivers, the county does not support the designation of The Gulch.

During the Dixie and Fishlake National Forests eligibility process, the county expressed repeated concern over the eligibility determinations made for this and other river segments on the Escalante Ranger District. The county does not believe that the Escalante River system is suitable because its flow is too regulated by irrigators.

When representatives of the Forest met with staff from the Navajo Nation and Hopi Nation in July 2006, the Tribes indicated that they favored "preservation" of forest resources including Wild and Scenic Rivers. No official communications from the Tribes confirming this support has been received.

In response to scoping, a non-profit organization expressed support for designation because of the segment's contribution to river system integrity. None of the three organized campaigns supported a positive finding of suitability for this segment.

Allen Rowley (Fishlake NF Supervisor) has recently spoken with the BLM Manager of the Grand Staircase-Escalante National Monument relative to suitability of this segment on FS lands, and has not yet received any indication of support or opposition.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Downstream from the Forest Service boundary, the BLM found The Gulch to be suitable for designation because the presence of "high quality scenery, outstanding recreation, natural arch, peregrine habitat, Traditional Cultural Property, riparian area, petrified wood are the characteristics that make it worthy [as an addition to the NWSRS]" (Appendix 11, GSENM FEIS Monument Plan).

The Dixie National Forest, Glen Canyon National Recreation Area, Bryce Canyon National Park, and GSENM all worked together on eligibility for this river segment. Final determinations of suitability were reserved for individual agencies to make on their own.

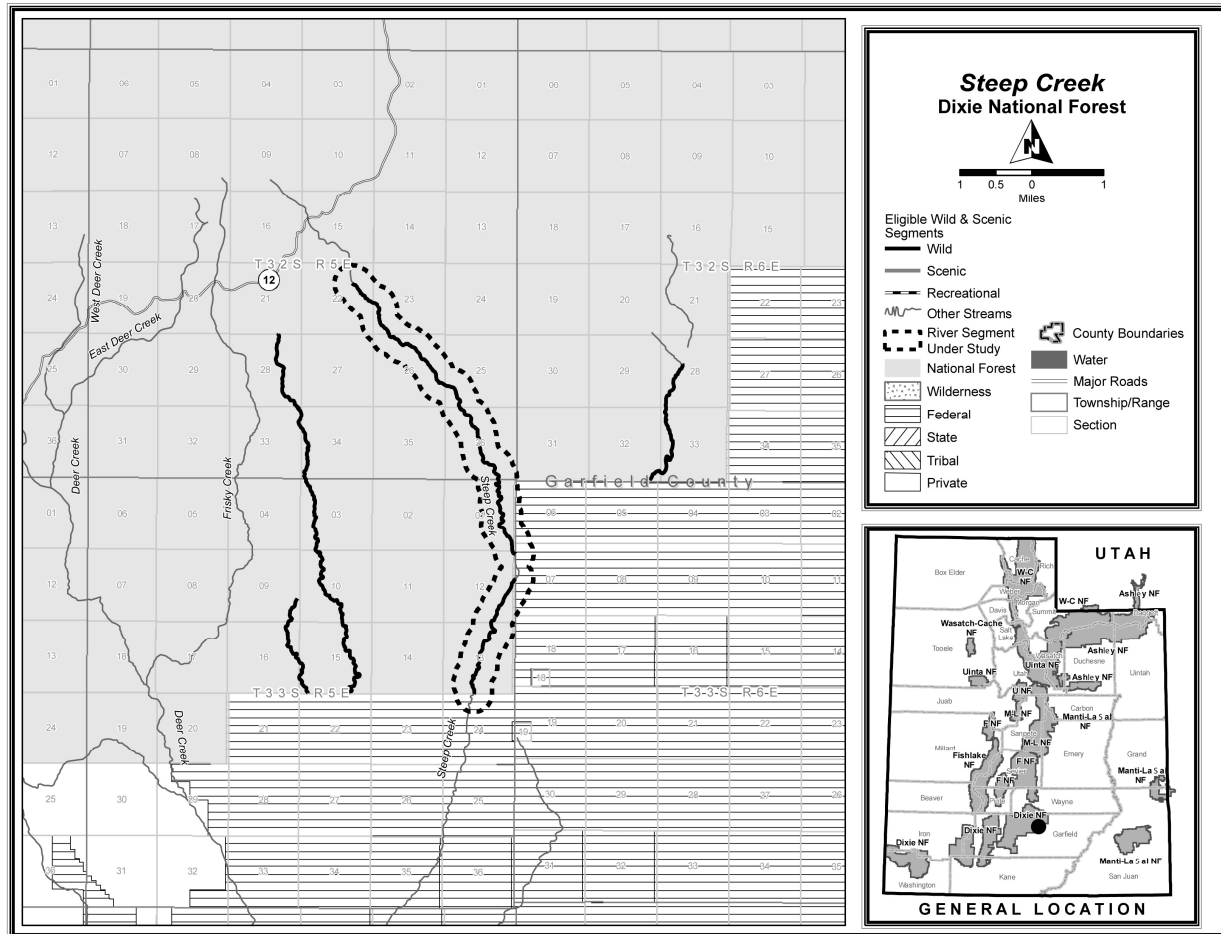
(5) Contribution to river system or basin integrity.

The Gulch is not one of the tributaries identified in the GSENM plan that contributes significantly to the flow of the Escalante River, however, as a perennial stream it does provide flow consistently to the system. The segment within the GSENM has been found suitable for designation.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

Boulder Outdoor Survival School holds a special use permit for survival training in the area. There may be opportunity to partner and use volunteers in the area from the school. No commitment has been expressed.

Steep Creek Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Steep Creek

River Mileage:

Studied: 16.2 miles, from headwaters (1 mile south of HWY 12) to The Gulch

Eligible: 7.3 miles, from headwaters to Forest boundary

Location:

Steep Creek	Dixie National Forest administered by the Fishlake National Forest, Fremont River Ranger District, Garfield County, Utah		Congressional District 2	
	Start	End	Classification	Miles
Segment 1	SE ¼ NE ¼ Sect. 22, T 32S, R 5E, SLM	NE ¼ NE ¼ Sect. 12, T 33S, R 5E, SLM	Wild	5.3
Segment 2	NE ¼ NE ¼ Sect. 12, T 33S, R 5E, SLM	SE ¼ NE ¼ Sect. 12, T 33S, R 5E, SLM	Wild (GSENM)	0.3
Segment 3	SE ¼ NE ¼ Sect. 12, T 33S, R 5E, SLM	SE ¼ SW ¼ Sect. 13, T 33S, R 5E, SLM	Wild	2

Physical Description of River:

Steep Creek, a perennial stream, is located on the Fremont Ranger District below Highway 12. Lower reaches are dominated by slickrock and ledges with pinyon and juniper trees transitioning to ponderosa pine. Upper regions just below Highway 12 are aspen and conifer in areas with deeper soils.

ELIGIBILITY

Name and Date of Eligibility Document: Appendix 4, Wild and Scenic River Eligibility, Grand Staircase Escalante National Monument (GSENM), 1998.

Determination of Free-flow: There are no known diversions, impoundments, or other channel modifications of Steep Creek on National Forest System lands.

Summary of Outstandingly Remarkable Values (ORV):

This stream was determined to be eligible by an interagency study headed by the Grand Staircase Escalante National Monument in 1998. However, many of the details from that determination have been lost. As a result, the ORV summaries are brief.

Scenic – The area offers dramatic contrasts of color, texture, and slope as is common to other segments of this and other similar drainages which have carved the associated landscape. This segment of riparian corridor extends over 7 miles into the Fishlake National Forest. The area in general as associated with the Monument is regionally, nationally, and even internationally recognized as an important scenic attraction.

Recreational – The steep winding canyon provides solitude and a primitive experience, however the segment contained within the Forest boundary is not unique enough to attract visitors from outside the more immediate geographic area. The area receives a low-level of use by hikers and backpackers. The few who do visit this segment are primarily locals.

Ecological – The area provides vital riparian areas within an otherwise desert ecosystem, as is the case for most riparian resources in this region.

This stream was determined to be eligible by an interagency study headed by the Grand Staircase Escalante National Monument in 1998.

CLASSIFICATION**Basis for the Classification of River:** Wild

There are no roads present in the river corridor. There is access to the headwaters via a non-motorized trail. The river corridor is located in a remote location that is difficult to access.

SUITABILITY REPORT

Landownership and Land Uses – The eligible river corridor is a 7.3 mile-long river segment and encompasses about 2,147 acres, and is entirely on National Forest System (NFS) lands administered by the Fishlake National Forest.

River Mile	Ownership
0 – 5.3	Fishlake National Forest (Fremont River RD)
0 – 0.3	Grand Staircase-Escalante National Monument
0 – 2	Fishlake National Forest (Fremont River RD)

The stream corridor is within Management Area 2A# (MA-2A#) according to the Dixie National Forest Plan. MA-2A# has a management emphasis on semi-primitive recreation opportunities with a “no surface occupancy” stipulation for mineral entry. The area provides multiple uses.

Mineral and Energy Resource Activities – There are no existing salable, locatable, or leasable mineral and energy resources development in the eligible segment.

Steep Creek is located in the Long Neck Mesa/Steep Creek/Oak Creek Roadless Area. According to the Dixie National Forest Roadless Area Minerals Evaluation the potential for this area was as follows:

Oil and Gas: Currently there are no producing wells or fields in this area. It has been only lightly explored. There are no leases, but industry has expressed interest in this general area. Expressions of Interest have been made for the area immediately to the northeast.

Oil potential associated with four possible plays (Late Proterozoic/Cambrian, Devonian-Pennsylvanian, Late Paleozoic, and Permo-Triassic Unconformity) is ranked as moderate to high (low certainty) along the eastern and southern portions of the Teasdale and Escalante Ranger Districts. Petroleum development potential is ranked by the UGS as low-moderate with the highest potential relative to the Devonian-Pennsylvanian and Permo-Triassic Plays. If leases are issued, exploratory drilling could occur. A total of 32 new exploratory wells are reasonably foreseeable for the Forest in the next 15 years. Of this total, only a couple of these would probably occur in this area. If a discovery were made, additional development wells could be drilled.

Jurassic sediments (Navajo Sandstone and Carmel Formation) are exposed in the area, however this area is not prospective for natural gas/methane due to the close proximity to the volcanic rocks of Boulder Mountain immediately to the west as well as uplift and erosion of known source/reservoir Cretaceous sedimentary rocks.

Carbon Dioxide: Moderate potential for occurrence (low certainty). Development potential is low-none because there is no market.

Geothermal: Occurrence potential is unknown due to the lack of identified thermal wells and springs. Due to the lack of known geothermal springs and wells and overall information, the development potential is considered low.

Coal: There are no known coal deposits in this area

Locatable Minerals: There are no known valuable deposits of base or precious metals or other locatable minerals. Development potential is low.

Common Variety: Sandstone, limestone and other sedimentary rocks in the area could be developed for decorative stone or building stone. Colluvium consisting of displaced sedimentary rocks and volcanic rock transported from Boulder Mountain could be developed for riprap, decorative stone, and building stone. Development potential is considered moderate, most likely on a small scale, localized basis.

References:

Utah Geological Survey, 2004, The Oil, Gas, Coalbed Gas, Carbon Dioxide and Geothermal Resources of the Fishlake National Forest, Southwestern Utah, April 30, 2004.

Doelling, H.H., 1972. Southwestern Utah Coal Fields: Alton, Kaiparowits Plateau and Kolob-Harmony. Utah Geological and Mineralogical Survey, Monograph Series No. 1, 1972.

Water Resources Development – There are no known planned or existing water developments (dams, diversions or channel modifications) on these segments. There are no historic, current, or known planned Federal Energy Regulatory Commission permits or license applications for this corridor. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – The Slickrock Trail (#35120) provides access to the river’s headwaters and is located in the river corridor. This non-motorized trail is 24 miles long and receives low to moderate use.

There is a series of five spring-fed stock ponds located near the headwaters of Steep Creek, however only three of the five are located within the river corridor. The five stock ponds are inter-connected with pipelines.

There are no other facilities and/or other developments located in the river corridor. The Steep Creek river corridor is entirely located in the Long Neck Mesa/Steep Creek/Oak Creek Inventoried Roadless Area.

Grazing Activities – The river segment is located within the Oak Creek Allotment. The Oak Creek Allotment consists of 72,712 acres and is an active allotment with three permittees.

Oak Creek Allotment		
<u>Permittee Name</u>	<u>Number of mature cow/Nursing</u>	<u>Active Grazing Dates</u>
B.K. & M. Taylor	196	06/01 to 10/15
Tercero Corp.	806	06/01 to 10/15
R. & K. Fillmore	76	06/01 to 10/15

Recreation Activities – Recreational use of Steep Creek is considered low. There is no trail following the river corridor, however the area could be used by hikers and backpackers. The steep winding canyon provide solitude and a primitive experience.

Other Resource Activities – The upper one half mile of the Steep Creek corridor contain some aspen stands. Forest managers may work to regenerate aspen in this area through the use of prescribed fire among other tools.

Special Designations – None.

Socio-Economic Environment – The river segment is located within Garfield County. Boulder and Escalante are the two closest towns. Access to the area is provided by Highway 12 – an All-American Road. Steep Creek flows from the Dixie National Forest onto the Grand Staircase-Escalante National Monument.

Garfield County is a largely rural county where traditional natural resource economic endeavors have dominated historically. In recent years, there has been a growth in recreation, tourism, and services. Much of this growth in recreation and tourism can be attributed to the designation of the Grand Staircase-Escalante National Monument in 1996. The county is struggling to retain rural traditions and lifestyles as well as “working” connections with the land. In the face of rising land values and globalization, traditional industries such as farming and ranching are becoming more difficult. Second home ownership has increased in the county dramatically. Over 60% of property tax notices in Garfield County are sent out of the county (39% out of state or country).

A recent visitor study of the Grand Staircase-Escalante National Monument indicates that approximately 600,000 people visit the area every year. While most of the visitors remain in the frontcountry visitor areas, exploration into the backcountry is increasing. Visitors come from throughout the United States and the world. About 14% of visitors are from Utah, 13% from California, 6% from Arizona, 5% from Colorado, and 10% from other western states. About 30% come from the other 39 states leaving 23% from other countries. The average visitor spends three days in the area. Only 20% of these visitors indicated that the Monument was their primary destination. Many of these visitors end up exploring the

forest. The most common visitor activities reported were hiking, photography, scenic driving, and viewing natural features. Escalante and Bryce Canyon are the two most visited communities near the Monument. Boulder also experienced high visitation. The average amount spent by a group of three to the area was just under \$500. This means that more than \$20.6 million is being directly spent in Garfield and Kane counties because of the designated Monument. This is the equivalent of more than 430 full-time jobs. (A Front Country Visitor Study for the Grand Staircase-Escalante National Monument, Utah State University, Professional Report IORT PR2006-01, April 2006).

More specifically, trends and conditions:

Garfield County, the fifth largest county in the state has the highest percentage of federal land (over 90%) in a county in the state of Utah.²⁸ The county contains over one million acres of National Forest System lands (including the Box-Death Hollow Wilderness Area) and large areas of other federal land, including portions of Grand Staircase-Escalante National Monument, Bryce Canyon National Park, Capitol Reef National Park, and Glen Canyon National Recreation Area. There are only about 170,000 acres of private land in the county. Public lands provide both challenges and opportunities for economic development in the county. The county is sparsely populated and is only projected to grow at a 1.0 percent annual rate between 2005 and 2050, a rate below the state average.

According to a 2003 Utah Bureau of Economic Analysis Report, Garfield County residents had one of the five lowest levels of total personal income in the state. Additionally, Garfield County had the second highest unemployment rate (10.8 percent) in the state according to 2003 Utah Department of Workforce Services information, exceeded only by Emery County's 11.0 percent unemployment rate. Slow job growth and unemployment are recurrent problems for the county. Traditionally, county residents have relied primarily upon ranching and timber. While there is a desire to retain these traditional sources of economic opportunity, services related to recreation and tourism are growing quickly in the county (*People and the Forests*, 2003). Services are projected to increase from a 30.1 percent share in the Garfield County economy in 2005 to a 37.8 percent share in 2030 (State of Utah 2003).

According to Garfield County, the growth in the recreation and tourism industries has not been strong enough to provide the economic growth that has been achieved in more diverse parts of the state (Bremner 2006).²⁹ While these services (mostly related to leisure and hospitality) represent the largest sector in the Garfield County economy, government jobs (the sector ranked second) make up a much higher percentage of payroll wages (State of Utah 2003). There is a perception that leisure and hospitality jobs will not pay as much as jobs in other more traditional sectors.³⁰ According to Garfield County, "... Garfield County is struggling economically. Schools are showing declining enrollment, and additional natural resource based industries have been all but eliminated in the county. ... Garfield County is struggling and unless changes [in land management and opportunities] are made relatively soon, things will get tougher" (Bremner 2006). Also according to Garfield County Commissioner Maloy Dodds in testimony to Congress, "...most tourist-generated jobs generally are minimal skill, minimum wage jobs – not the kind that can support a family." Another important fact that the Commissioner noted, "Federal destination areas [are] a mixed blessing at best" for Garfield County because increased visitors can be a

³⁰ In the book *Visions of the Grand Staircase-Escalante* (compiled at the time of the Grand Staircase-Escalante National Monument planning process in the 1990s), Gail Blattenberger and David Kiefer acknowledge, "[m]inimum wages plus tips at Ruby's Inn are what the locals [in Garfield County] envisage from the service industry, but high tech service enterprises are also viable given an investment in communications infrastructure." Blattenberger and Kiefer suggest that while based on past performance "economic well-being" is clearly an issue in Kane and Garfield counties, "[e]xtractive industries are not an optimal or even a viable solution to the economic situation in these counties." Furthermore, "change will certainly come to these economies" and be met with "resistance (because of) the desire for a land-based economy (which is) seen as crucial to the quality of life in the rural West." According to the authors, the key is to "find ways of preserving our land-based Western heritage and lifestyle (which are so important to rural residents) along with the natural treasures of the countryside." Roughly 10 years later, we seem to face the same conditions, trends, attitudes, fears, opportunities, and challenges (Blattenberger and Kiefer 1998).

burden to the county in terms of increased cost of garbage and search and rescue operations (Testimony to House Resources Committee's Forest and Forest Health Subcommittee, June 15, 2005).

The closest communities to the river segment are Escalante and Boulder. Escalante is projected to grow from about 800 people in 2000 to about 1300 in 2050. Boulder is projected to grow from 180 in 2000 to around 300 in 2050.

The river segment and the areas below Highway 12 are also used regularly by residents of Wayne County. Wayne County has the second highest percentage of federal land of any county in the state. The county contains about 160,000 acres of National Forest System lands. The county contains the second fewest acres of private land in the state, trailing only Daggett County (which is four times smaller than Wayne County) by about 8,000 acres. From 2004 to 2005, Wayne County was only one of three counties to register negative population growth. The county had a -0.6% annual growth rate (the lowest in the State) (State of Utah 2006). However, from 2005 to 2050, the county is projected to almost double in population and grow at a 1.2 percent annual growth rate (State of Utah 2005).

Education and health services is the largest sector in the Wayne County economy. This sector is buoyed by the presence of Aspen Health Services' Aspen Achievement Academy, a wilderness therapy program that is a major county employer. Headquartered in Loa, the program operates on BLM and Forest Service lands. Government is the second largest sector in the county. Since 1980 agriculture has decreased dramatically and services have increased, a trend that is projected to continue into 2030. In 1980, agriculture made up 26.9 percent of the economy, while services took only a 3.5 percent share. By 2002, agriculture had declined to 13.8 percent and services had increased to 24.9 percent. In 2030, *People and the Forests* projects that agriculture will take a 6.5 percent share, while services will have increased to 30.3 percent (State of Utah 2003). This increase is visible in the increasingly popular tourist venue of Torrey at the gateway to Capitol Reef National Park.

While agriculture continues to decline, it is an important part of the county's traditions and customs. Many county residents work multiple jobs to keep the traditions of the past alive. The Wayne County General Plan identifies tourism promotion as an important economic development tool; however, there is concern over preserving quality of life while implementing this strategy.

Wayne County continues to struggle with issues of poverty. The county's 1999 poverty rate exceeded 15 percent, almost one and one-half times the state average (State of Utah 2003). Total personal income in Wayne County is the fourth lowest in the state. Growth rates of total personal income were second to last in the state from 2000 to 2003 (Bureau of Economic Analysis 2003).

Teasdale, Grover, and Torrey are the closest towns in Wayne County to the river segment. Torrey has a population of 171 (2005). None of the communities in Wayne County are expected to grow rapidly.

Current Administration and Funding Needs if Designated – The current administering agency is the USFS. The U.S. Forest Service and BLM would share management of the segment.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared

preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

There has been no demonstrated or potential commitment to share preservation and/or administration.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Not applicable, as all of the land through which the segment flows is federally owned.

(3) Support or opposition to designation.

Garfield County is working on a Resource Management Plan for all lands in the county. They have included an analysis of Wild and Scenic Rivers in their discussions. While their RMP supports the designation of Cataract Canyon (Colorado River) and the Dirty Devil River as Wild and Scenic Rivers, the county does not support the designation of Steep Creek.

During the Dixie and Fishlake National Forests eligibility process, the county expressed repeated concern over the eligibility determinations made for this and other river segments on the Escalante Ranger District. The county does not believe that the Escalante River system is suitable because its flow is too regulated by irrigators.

When representatives of the Forest met with staff from the Navajo Nation and Hopi Nation in July 2006, the Tribes indicated that they favored "preservation" of forest resources including Wild and Scenic Rivers. No official communications from the Tribes confirming this support has been received.

In response to scoping, a non-profit organization expressed support for designation because of the segment's contribution to river system integrity. None of the three organized campaigns supported a positive finding of suitability for this segment.

Allen Rowley (Fishlake NF Supervisor) has recently spoken with the BLM Manager of the Grand Staircase-Escalante National Monument relative to suitability of this segment on FS lands, and has not yet received any indication of support or opposition.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Downstream from the Forest Service boundary, the BLM found Steep Creek to be suitable for designation because "high quality scenery, recreational values, and riparian areas make this a worthy addition to the WSR system" (Appendix 11, GSENM FEIS Monument Plan).

The Dixie National Forest, Glen Canyon National Recreation Area, Bryce Canyon National Park, and GSENM all worked together on eligibility for this river segment. Final determinations of suitability were reserved for individual agencies to make on their own.

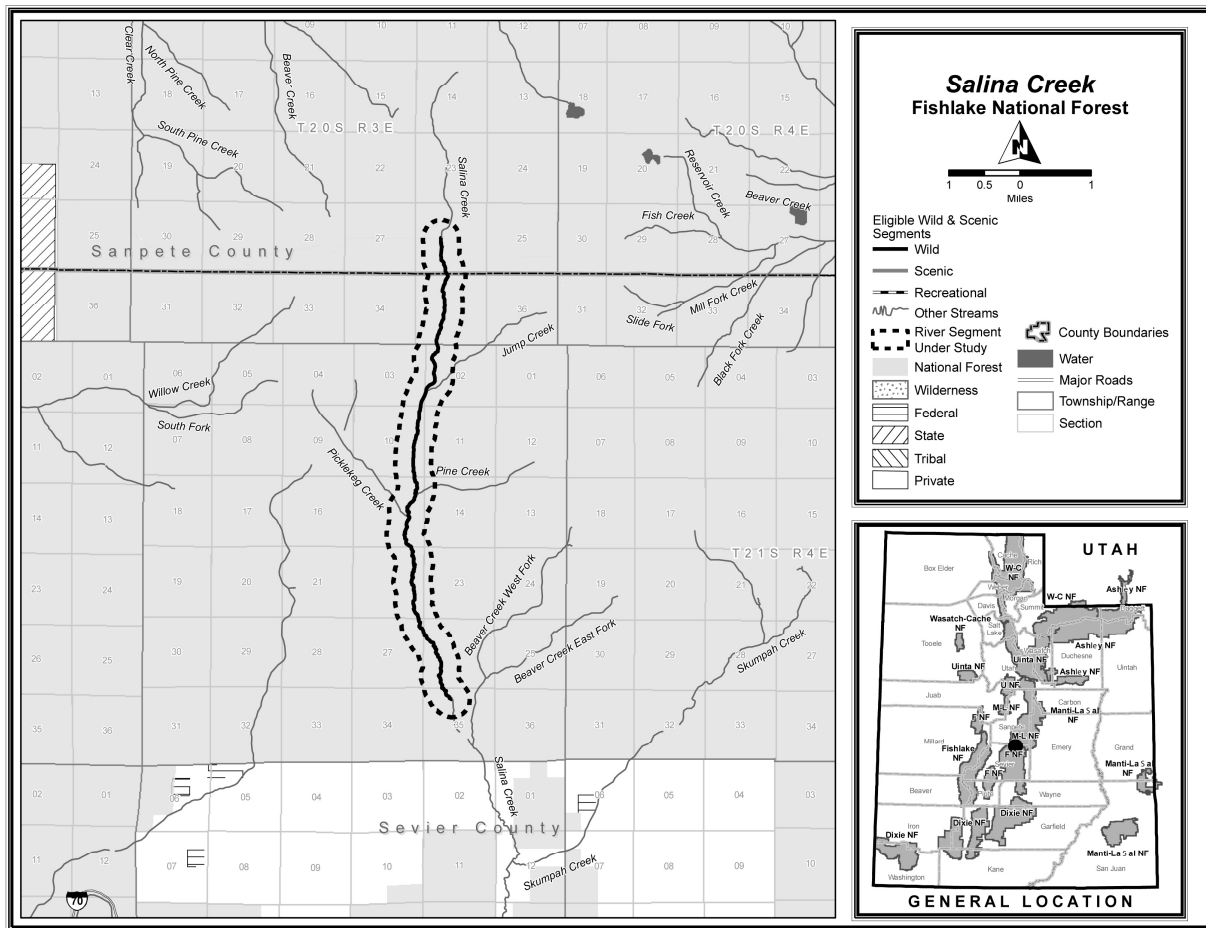
(5) Contribution to river system or basin integrity.

Steep Creek is not one of the tributaries identified in the GSENM plan that contributes significantly to the flow of the Escalante River, however, as a perennial stream it does provide flow consistently to the system. The segment within the GSENM has been found suitable for designation.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

No commitment has been expressed.

Salina Creek Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Salina Creek

River Mileage:

Studied: 32 miles, from the headwaters to confluence with Sevier River near Salina

Eligible: 6 miles, downstream from the Forest boundary to the “second crossing” of Salina Creek.

Location:

Salina Creek	Fishlake National Forest, Richfield Ranger District, Sevier County, Utah		Congressional District 3	
	Start	End	Classification	Miles
Segment 1	NE ¼, SW ¼, Sect. 26, T.20S., R.3E., SLM	SE ¼, NW ¼, Sect. 35, T.21S., R.3E., SLM	Wild	7.4*

* The mileage of this segment has been changed from an ocular estimate of mileage to mileage that was calculated using GIS

Location of Eligible Segment:

Segment 1 – From the Forest boundary in Gunnison Valley to the “second crossing” of Salina Creek, upstream from the confluence with Beaver Creek.

Physical Description of River Segment: Salina Creek flows south from its headwaters in the Order Mountains, which are part of the southern extension of the Wasatch Plateau. Salina Creek is fed from snowmelt accumulated from Black Mountain (10,782 feet), Mt. Musinia (10,984 feet), Water Hollow, and Snow Corral Ridges. In addition, several springs also provide water to the creek.

The creek has excellent structure, large woody debris and pool/riffle ratios. The stream has low sediment ratios. The upper part is rather narrow. Below the Pickle Keg Creek tributary the stream widens.

ELIGIBILITY

Name and Date of Eligibility Document: Fishlake and Dixie National Forest Wild and Scenic River Evaluation (2004, Pg. 11)

Determination of Free-flow: There are no known diversions of Salina Creek on Forest Service Lands. However, multiple diversions and small dams occur on the lower sections of Salina Creek (below the eligible segment).

Summary of Outstandingly Remarkable Values (ORVs):

Recreational – Native Bonneville cutthroat and nonnative salmonids occupy the creek and provide a quality fishing experience. Although it is unlikely to catch a trophy fish from Salina Creek, the creek offers an exceptional fishing experience. Upper Salina Creek is somewhat remote and receives low fishing pressure. The creek has excellent structure, large woody debris, and pool/riffle ratios. Many streams in this area lack those characteristics. The stream has low sediment levels; this is especially remarkable considering the parent material in the area. The upper part is rather narrow, which provides an expert-level fly-fishing challenge. Below the Pickle Keg Creek tributary, the stream widens, which provides easier fly-fishing opportunities.

CLASSIFICATION

Basis for the Classification of River – Wild

No roads exist along this segment of Salina Creek.

SUITABILITY REPORT

Landownership and Land Uses – About 1,920 acres of National Forest Service System Lands are within the river corridor. The National Forest Service is the only land holder within the corridor of the eligible segment.

River Mile	Ownership	Acres
	Fishlake National Forest	1,920

The eligible segment passes through Management Area 9A (MA-9A) according to the Fishlake National Forest Plan. MA-9A has a management emphasis on protection of riparian and aquatic ecosystems. The area provides multiple uses.

Water Resources Development – No existing structures are known along the stream corridor within the eligible segment. There are no known plans for future water resources development. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – Salina Creek flows in a southern direction on

the National Forest. Vehicular access exists just below the eligible segment via Forest Road (FS 009) and above the segment from the Skyline Drive (FS 001). A horse and foot trails parallels the creek to the east generally less than one mile from the stream.

The entire segment is within the White Mountain inventoried roadless area.

Mineral and Energy Resource Activities – Salina Creek is near an extensive underground coal deposit that has been actively mined for many years. No known structures are located within the corridor of the eligible segment. There are no known proposals for mineral and energy resource activities within the stream corridor.

Grazing Activities – This segment of Salina Creek passes through one active cattle grazing allotment (Salina Creek Allotment). A moderate level of livestock grazing occurs within the riparian corridor.

Recreation Activities – The creek and adjacent terrain is used as a base area for recreation activities such as hiking, horseback riding, hunting, and camping. “Second Crossing” (just below the eligible segment) is a popular dispersed camping area.

Other Resource Activities – None

Special Designations – None

Socio-Economic Environment – This segment of Salina Creek is about 25 miles upstream from Salina, Utah (pop. 2,400) and a remote part of Sevier County (pop. 21,000). Sevier County’s largest employment sectors are non-farm proprietors, trade, government, and services.

Current Administration and Funding Needs if Designated – The current administering agency is USFS. No land acquisition would be necessary.

The following information is based on 2001 data, which doesn’t account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

There has been no demonstrated or potential commitment to share preservation and/or administration.

(2) The state/local government’s ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Not applicable, as the land through which this segment flows is all federally owned.

(3) Support or opposition to designation.

The Sevier County Commission has expressed opposition to designation. There were no expressions of support for designation during scoping.

The Forest received little specific comment on the DEIS concerning Salina Creek. One group (Grand Canyon Trust) supported suitability of this segment along with other eligible segments on this and other adjacent Forests. There were no other expressions of support for designation in the comment letters we received. None of the three organized campaigns supported a positive suitability finding for this segment.

In summary, there is little interest in seeing this river segment designated. Some, who did comment, questioned whether the additional protections available under wild and scenic rivers designation would be necessary to protect this segment of Salina Creek.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Not applicable, as the county plan is silent on Wild and Scenic rivers in general and Salina Creek in particular. Designation would not be inconsistent with current forest plan.

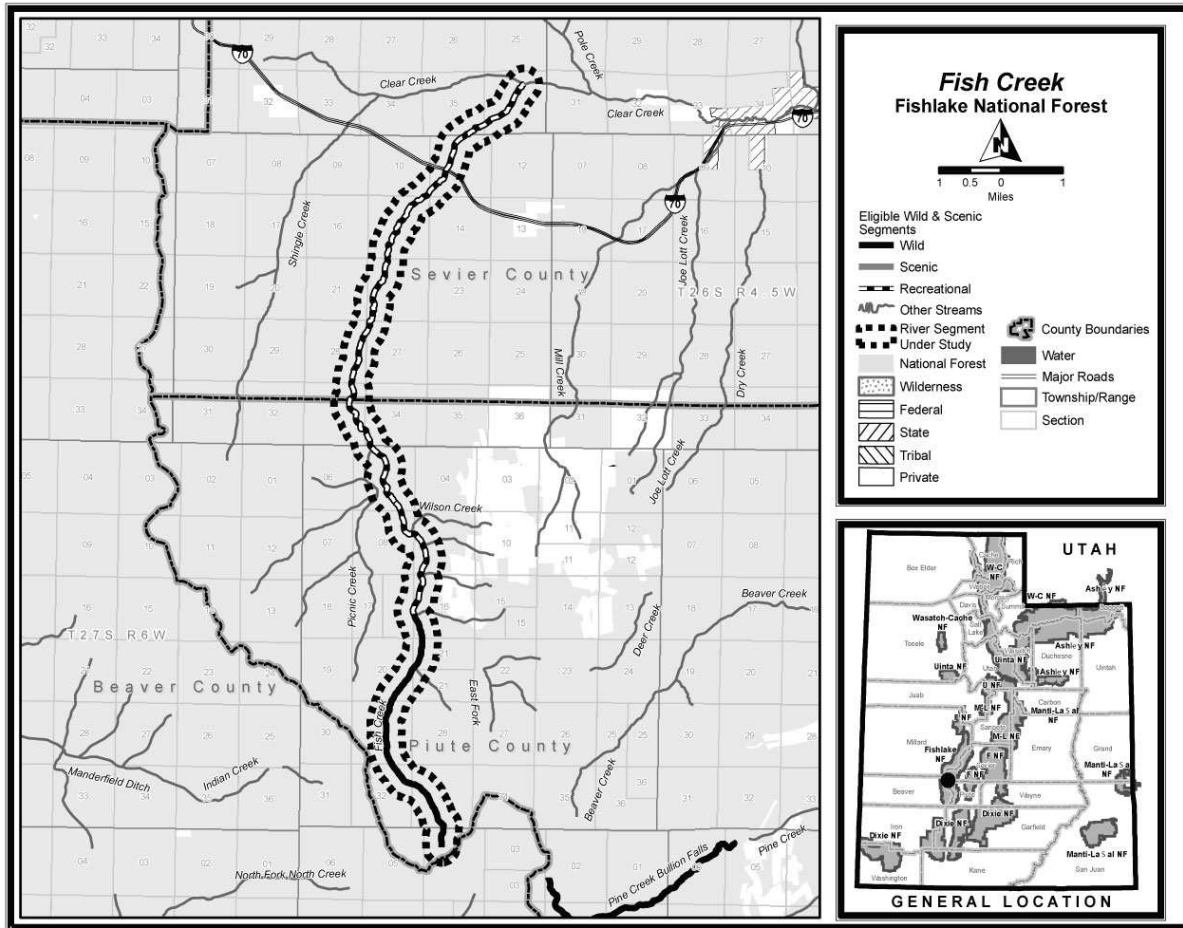
(5) Contribution to river system or basin integrity.

Designation of this creek would not contribute to river system or basin integrity. No other portions of the river system or basin have been designated.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

No commitment has been expressed.

Fish Creek Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Fish Creek

River Mileage:

Studied: 17 miles, from its point of origin to its confluence with Clear Creek
Eligible: Same

Location:

Fish Creek	Fishlake National Forest, Beaver Ranger District, Sevier and Piute Counties, Utah		Congressional District UT -2 UT-3	
	Start	End	Classification	Miles
Segment 1	NE ¼, NW ¼, Sect 4, T.28S., R.5W., SLM	NW ¼, SW ¼, Sect. 16, T.27S., R.5W., SLM	Wild	4.3*
Segment 2	NW ¼, SW ¼, Sect. 16, T.27S., R.5W., SLM	NW ¼, NE ¼, Sect. 36, T.25S., R.5W., SLM	Recreational	10.5*

* The mileage of this segment has been changed from an ocular estimate of mileage to mileage that was calculated using GIS

Location:

Segment 1 – Headwaters to the confluence of Trapper Creek in section 16, as Wild.

Segment 2 – From the confluence of Trapper Creek in section 16 to the confluence with Clear Creek, as Recreational.

Physical Description of River Segment: Fish Creek is one of the longest creeks without impoundments on the Fishlake Forest. It has a large volume of water and high potential for future fisheries development. Fish Creek begins life as a first order tributary and ends up as a third order stream by the time it reaches Clear Creek.

Fish Creek flows northward from its source between Mt. Belknap and Mt. Baldy, both located in the Tushar Mountains. Fish Creek flows for approximately 3.5 miles across National Forest land before it passes the western edge of the Gold Mountain Mining District. The total length of Fish Creek is approximately 17 miles. It accumulates the flow from numerous tributaries before it merges with Clear Creek about 1 mile upstream of Pole Creek.

An extensive riparian zone exists along Fish Creek on National Forest System lands with riparian vegetation consisting of willows, ash, cottonwoods, sedges, and grasses. As one moves away from the stream, vegetation changes to forms more typical of high plateau environments and includes coniferous trees at the higher elevations. The subalpine zone includes mountain brush, high plateau species, and understory plants.

ELIGIBILITY

Name and Date of Eligibility Document: Fishlake and Dixie National Forest Wild and Scenic River Evaluation (2004, Pg. 15)

Determination of Free-flow: There are no known diversions of Fish Creek on Forest Service Lands. The source of Fish Creek is on federal land and has locally been impacted by seasonal grazing. Historically, Fish Creek was impounded by two hydroelectric plants and a sawmill.

Summary of Outstandingly Remarkable Values (ORVs):

Prehistoric/Historic – Near the headwaters region, Fish Creek flows near the edge of the Gold Mountain Mining District. Gold was first discovered in Fish Creek but the only sizeable mine near Fish Creek was the Trappers' Pride. The Trappers' Pride Lode was above Fish Creek near Tip Top Peak. Fish Creek was the site of two hydroelectric power plants that supplied the Kimberly community with electricity. The volume of water in Fish Creek fluctuated, so the creek was supplemented with water from other creeks via a steel and wood penstock. These plants were built by Charles Skoogaurd who later built the Fish Lake Lodge. There was also a sizeable sawmill close to the confluence of Fish Creek and Clear Creek. Evidence exists that the area of Fish Creek has been used historically by the Fremont Indian culture and more recently by the Utes.

Wildlife/ Ecology – Dense riparian vegetation along with an intact watershed exists in the upper Fish Creek drainage. The Forest Service has designated the upper watershed as the Fish Creek Research Natural Area. The lower portion of the watershed has been impacted more by human intervention but still retains the important components to sustain ecological integrity. The entire watershed provides important habitat for neotropical and resident avifauna, deer and other mammals, amphibians, and reptile species.

Fish – Historically, this stream course supported native Bonneville cutthroat trout. Currently, Fish Creek supports non-native salmonid populations; however, remnant populations of native Bonneville cutthroat

trout may exist in the headwaters and supporting tributaries. Native cyprinids, suckers, sculpins, and dace exist in the lower portion of Fish Creek. Fish Creek has a large volume of water and high potential for future fisheries development.

CLASSIFICATION

Basis for the Classification of River: Segment 1 – Wild; Segment 2 – Recreational

Vehicular accesses to the creek exist at the lower, northern end of the watercourse near County Road 4, which is adjacent to Interstate 70. Access to Fish Creek is limited to several historic mining routes and a hiking trail along the lower one-half of the drainage. A portion of Fish Creek from I-70 south for approximately three miles is paralleled by an old road and ATV trail that receives moderate use.

SUITABILITY REPORT

Landownership and Land Uses – There are about 5440 acres of NFS lands within the segment corridor. There are three small, inaccessible private land tracts. These tracts were sites of historic hydroelectric power sites. The sites total less than 10 acres of private land within the river corridor.

River Mile	Ownership	Acres
0 - 6	USFS – (The headwaters are within the Fish Creek Research Natural Area)	
6 - 17	USFS	
	Total	5440

The stream passes through Management Area 10A (MA-10A), MA-3B, and MA-4A according to the Fishlake National Forest Plan. MA-10A is a research natural area with an emphasis on research, study, observations, monitoring, and educational activities that are nondestructive and non manipulative and maintain unmodified conditions. MA-3A has a management emphasis on non-motorized recreation outside of wilderness areas. MA-4A has a management emphasis on fish habitat improvement. The area provides multiple uses.

Water Resources Development – No existing diversions or planned water developments are known along the stream corridor. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – Fish Creek flows across the Fishlake National Forest for most of its length. Vehicular access to the creek exists at the lower, northern end of the watercourse near County Road 4, which is adjacent to Interstate 70 (I-70). Access to Fish Creek is limited to several historic mining routes and a hiking trail along the lower one-half of the drainage. A portion of Fish Creek from I-70 south for approximately 3 miles is paralleled by an old road and all-terrain vehicle (ATV) trail that receives moderate use. The portion from I-70 to the Clear Creek road is easy to hike with evidence of some ATV use. There are a couple of places on the southern reaches of the stream that are accessible by four-wheel drive vehicles and ATVs.

The upper reaches of the segment are within the Tushar Mountain inventoried roadless area.

Mineral and Energy Resource Activities – There is considerable historical mining development in the adjacent area of the Gold Mountain Mining District. The Kimberly area of the Gold Mountain Mining District attracts considerable interest in the mining history of Utah. The Gold Mountain Mining District was very active in the late 1800s and left a considerable legacy of mining artifacts that are protected and managed by the Forest Service. The remains of two hydroelectric power plants exist along Fish Creek. These plants were the first hydroelectric plants in the area. There are no known plans for future mineral and energy resource activities.

Grazing Activities – Fish Creek passes through two active cattle grazing allotments (Joe Lott – Fish Creek Allotment and Clear Creek Allotment). The Fish Creek corridor receives a moderate level of livestock use. The Clear Creek Valley area has a long agriculture and ranching history. Historically, cattle ranchers used the high meadows and riparian areas along streams for cattle forage, and Clear Creek canyon was used as a corridor for moving animals from western Utah to the high plateaus to the east.

Recreation Activities – Several non-motorized trails parallel portions of Fish Creek. A portion of Fish Creek from I-70 south for approximately 3 miles is paralleled by an old road and all-terrain vehicle (ATV) trail that receives moderate use. Fish Creek is near popular areas including the Kimberly mining district, the Fremont Indian State park, and the Castle Rock Campground.

Other Resource Activities – None

Special Designations – The headwaters of Fish Creek is within a Research Natural Area designated by the Chief of the Forest Service.

Socio-Economic Environment – Upper Fish Creek is in a remote part of Piute County (pop. 1,400). Piute County's largest employment sectors are agriculture, government, and non-farm proprietors. Lower Fish Creek is in a remote part of Sevier County (pop. 21,000). Sevier County's largest employment sectors are non-farm proprietors, trade, government, and services.

Current Administration and Funding Needs if Designated – The current administering agency is USFS. No land acquisition would be necessary.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

There has been no demonstrated or potential commitment to share preservation and/or administration.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Nearly all of the river corridor is on federally owned land. Less than 10 acres of the corridor is on private land within Piute County. Those tracts of private land are zoned "agriculture".

(3) Support or opposition to designation.

During scoping, a private party expressed opposition to designation, largely based on conflicts with potential mineral development. Opposition to suitability relative to mineral development was also central in comment letters received. None of the three organized campaigns supported a positive suitability finding for this segment.

The Sevier County Commission initially expressed opposition to any designation. However, after further

consideration during recent conversation with Allen Rowley (Fishlake NF Supervisor) in which he noted that designation should not interfere with present mineral or water rights issues; the commissioners stated they would now be in support of suitability towards Fish Creek's designation.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Not applicable; both county plans are silent on Wild and Scenic rivers in general and Fish Creek in particular. Designation would not be inconsistent with current Forest plan.

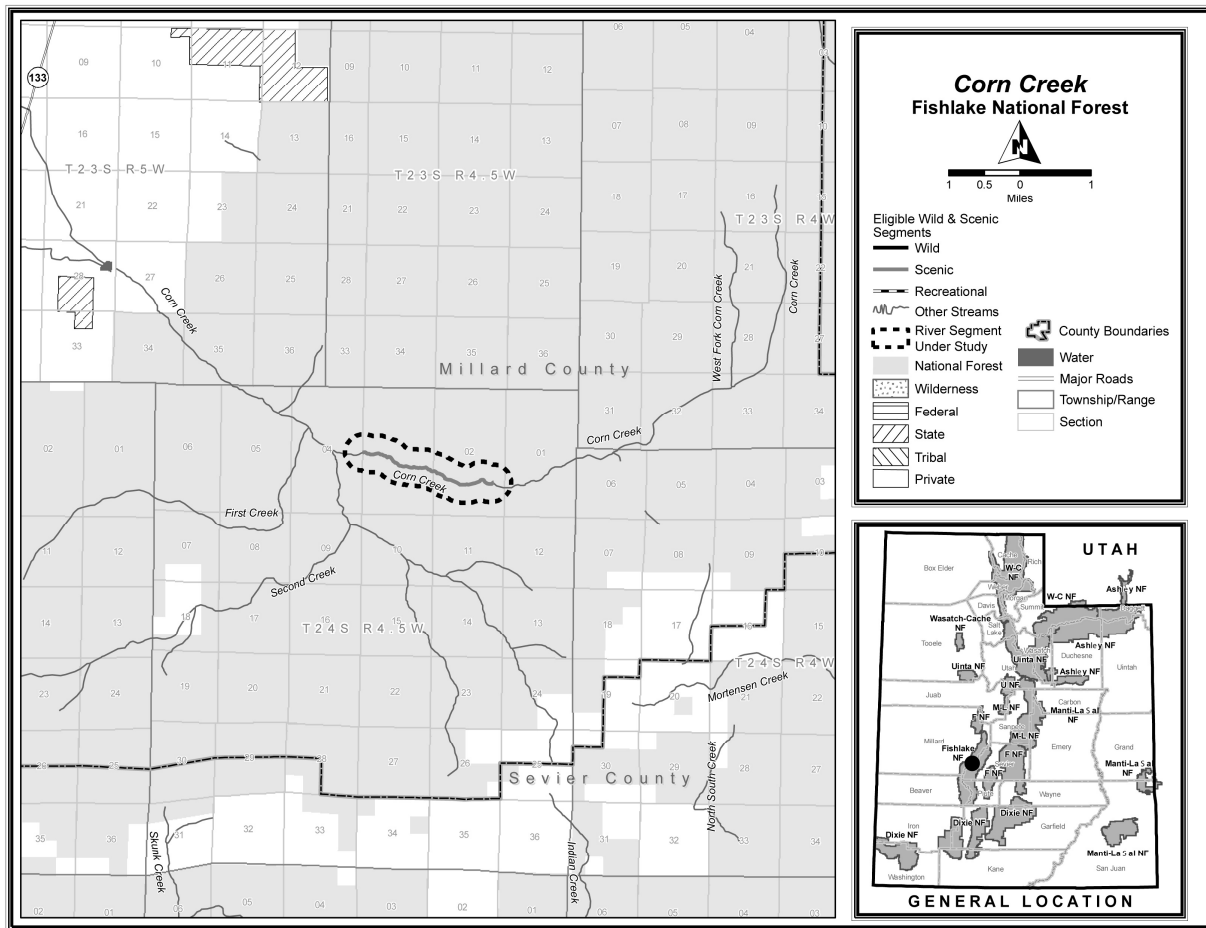
(5) Contribution to river system or basin integrity.

These segments represent the entire Fish Creek system. The Fish Creek system is a small part of the Clear Creek basin.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

No commitment has been expressed.

Corn Creek Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Corn Creek

River Mileage:

Studied: 14 miles, from the headwaters to private land

Eligible: 2 miles, from the confluence with Big Springs down to the confluence with Monk Springs Creek.

Location:

Corn Creek	Fishlake National Forest, Fillmore Ranger District, Millard County, Utah		Congressional District 3	
	Start	End	Classification	Miles
Segment 1	NE ¼ SE ¼ Sect. 2, T 24 S, R 4 W, SLM	NW ¼ NW ¼ Sect. 3, T 24 S, R 4 W, SLM	Scenic	2

Physical Description of River Segment: Corn Creek flows west from its headwaters in the Pahvant Mountain range. Corn Creek is supported by snowmelt accumulated from Sunset Peak (10,088 feet), Middle Mountain (7,344 feet), and Leavitt's Peak (8,640 feet). In addition, several springs provide water.

The West Fork and East Fork of Corn Creek provide the primary water for the system. The East Fork of Corn Creek begins at an elevation of about 8,500 feet and ends at 5,015 feet, for a drop of approximately

3,485 feet. As Corn Creek leaves the National Forest, it flows across private lands before it is dispersed through irrigation canals and drainage ditches near Kanosh.

Perennial flows in Corn Creek provide quality aquatic habitat all year.

ELIGIBILITY

Name and Date of Eligibility Document: Fishlake and Dixie National Forest Wild and Scenic River Evaluation (2004, Pg. 20)

Determination of Free-flow: There are no known diversions of Corn Creek within the eligible segment on Forest Service Lands. The natural stream flow of the river is unimpaired.

Summary of Outstandingly Remarkable Values:

Recreational – The best fishing experience on Corn Creek occurs in the non-motorized segment, below Big Springs. Within that segment, an angler might catch a large native trout in a semi-primitive setting. Above Big Springs, there is too little water to sustain a quality fishery. Below Monk Springs Creek, the motorized access alters the fishing experience.

The entire length of Corn Creek receives high recreation use. Specifically, the Adelaide campground near the confluence with Second Creek is heavily used seasonally. Recreationally, the lower 3.5 mile section of Corn Creek, through Kanosh Canyon, has vehicular access via a Forest Service road. The lower portion of Corn Creek is used by ATVs and equestrians. The upper two-thirds of Corn Creek are designated non-motorized access only. Some horse use exists in the area.

CLASSIFICATION

Basis for the Classification of River– Scenic

Segment is accessed by a horse and foot trail. In the past, the trail was open to and accessed by motorized vehicles. That past access is still clearly evident.

SUITABILITY REPORT

Landownership and Land Uses – About 640 acres of National Forest Service System Lands are within the river corridor. The National Forest Service is the only land holder within the corridor of the eligible segment.

River Mile	Ownership	Acres
	Fishlake National Forest	640

The stream corridor is within Management Area 9F (MA-9F) and MA-4A according to the Fishlake National Forest Plan. MA-9F has a management emphasis on improving watershed conditions. MA-4A has a management emphasis on fish habitat improvement. The area provides multiple uses.

Water Resources Development – There are no known diversions of Corn Creek within the eligible segment on Forest Service Lands. There are no known plans for future water resources development. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – A foot and horse trail runs follows the length of the eligible segment. The segment is not within an Inventoried Roadless Area.

Mineral and Energy Resource Activities – Historically, mining exploration occurred along the lower portions of Corn Creek. There are no known plans for future mineral and energy resource activities.

Grazing Activities – the eligible segment is within an active cattle grazing allotment (Corn Creek Allotment). The segment receives a moderate level of livestock activity.

Recreation Activities – The creek and adjacent terrain serve as a base area for recreational activities such

as hiking, horseback riding, and camping. Adelaide campground (two miles downstream) is a developed Forest Service recreational and camping area.

Other Resource Activities – None

Special Designations – None

Socio-Economic Environment – The eligible segment is about 7 miles upstream from the community of Kanosh (pop. 476). Millard county's largest employment sectors are non-farm proprietors, agriculture, government, and trade. Primary use of the segment is by local residents.

Current Administration and Funding Needs if Designated – The current administering agency is USFS. No land acquisition would be necessary.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

There has been no demonstrated or potential commitment to share preservation and/or administration.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Not applicable, as the land through which this segment flows is all federally owned.

(3) Support or opposition to designation.

The Millard County Commission has expressed opposition to designation. During scoping a private citizen expressed opposition to any designation. None of the three organized campaigns supported a positive suitability finding for this segment.

Except for one group (Grand Canyon Trust) who supported suitability of this segment along with other eligible segments on this and other adjacent Forests, there were no expressions of support for designation.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

The county plan is silent on Wild and Scenic rivers in general and Corn Creek in particular. Designation would not be inconsistent with current forest plan.

(5) Contribution to river system or basin integrity.

The segment does not contribute to basin integrity. The eligible segment is one seventh of the creek on NFS land. The creek is diverted for agricultural purposes and does not connect to the larger basin integrity.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

No commitment has been expressed.

**Pine Creek Bullion Falls
Fishlake National Forest**

Eligible Wild & Scenic Segments

- Wild
- Scenic
- Recreational
- Other Streams
- River Segment
- Under Study
- National Forest
- Wilderness
- Federal
- State
- Tribal
- Private

County Boundaries

- Water
- Major Roads
- Township/Range
- Section

Scale: 1 0.5 0 1 Miles

Inset Map: UTAH

GENERAL LOCATION

Name of River: Pine Creek/ Bullion Falls

Studied: 10.7 miles, from its head waters to its confluence with the Sevier River
Eligible: 4 miles, from its headwaters to Bullion Falls

Pine Creek	Fishlake National Forest, Beaver Ranger District, Piute County, Utah		Congressional District UT-2	
	Start	End	Classification	Miles
Segment 1	NW ¼, NW ¼, Sect. 11, T 27 S, R 5 W, SLM	NE ¼, NW ¼, Sect. 5, T 27 S, R 4 W, SLM	Wild	4

Appendix A – Suitability Evaluation Reports

before its confluence with the Sevier River near Marysville.

ELIGIBILITY

Name and Date of Eligibility Document: Fishlake and Dixie National Forest Wild and Scenic River Evaluation (2004, Pg. 24)

Determination of Free-flow: There are no known diversions of Pine Creek within the eligible segment on Forest Service lands. The natural stream flow of the river is unimpaired.

Summary of Outstandingly Remarkable Values:

Wildlife/ Ecology: Pine Creek flows support a quality riparian habitat zone along its course. The upper portion of the watershed (above Bullion Falls) is designated as a Research Natural Area.

Native Fish: The area provides remote location for native fisheries. Bullion Falls is a significant natural barrier that provides isolation for the upper segment. DWR is considering Bonneville cutthroat trout recovery in the upper portions of the watershed. Pine Creek drains a rather large undeveloped watershed. The stream has significant boulders and cobble structures which limits potential impacts from sediment.

CLASSIFICATION

Basis for the Classification of River– Wild

A foot trail exists upstream from Bullion Falls. No known infrastructure exists along the upper portions of Pine Creek.

SUITABILITY REPORT

Landownership and Land Uses – About 1,280 acres of National Forest Service System Lands are within the river corridor. The Fishlake National Forest Service is the only land holder within the corridor of the eligible segment.

River Mile	Ownership	Acres
	Fishlake National Forest	1,280

The eligible segment passes through Management Area 10A (MA-10A), and MA-3B according to the Fishlake National Forest Plan. MA-10A is a research natural area with an emphasis on research, study, observations, monitoring, and educational activities that are nondestructive and non manipulative and maintain unmodified conditions. MA-3A has a management emphasis on non-motorized recreation outside of wilderness areas. The area provides multiple uses.

Mineral and Energy Resource Activities – Historically, mining exploration occurred along the lower portions of Pine Creek. Several structures are located in the lower portions of Pine Creek. No known infrastructure exists along the upper corridor of Pine Creek. The area is known to contain valuable minerals and periodically, interest in development is expressed. However, there are no known proposals for mineral and energy resource activities.

Water Resources Development – No existing structures are known along the stream corridor within the eligible segment. There are no known plans for future water resources development. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – From Bullion Falls upstream, a foot trail exists. Two road rights of way exist below the falls and outside of the ¼ mile corridor. The entire segment is within the Bullion - Delano inventoried roadless area.

Grazing Activities – The eligible segment passes through one inactive cattle grazing allotment (Cottonwood grazing allotment).

Recreation Activities – The creek and adjacent terrain is used as a base area for recreational activities such as hiking and camping. A semi-developed Forest Service recreation area occurs near Bullion Falls. A foot trail follows the upper portions of the creek.

Other Resource Activities – None

Special Designations – Part of the headwaters of Pine Creek is within a Research Natural Area designated by the Chief of the Forest Service.

Socio-Economic Environment – Upper Pine Creek is a remote part of Piute County (pop. 1,400). Piute County's largest employment sectors are agriculture, government, and non-farm proprietors.

Current Administration and Funding Needs if Designated – The current administering agency is USFS. No land acquisition would be necessary.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT:

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

There has been no demonstrated or potential commitment to share preservation and/or administration.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Not applicable, as the land through which this segment flows is all federally owned.

(3) Support or opposition to designation.

During scoping a private party expressed opposition to designation. The rationale was largely based on conflicts with potential mineral development. None of the three organized campaigns supported a positive suitability finding for this segment.

Comment letters received were generally opposed to designation; with the exception of the Grand Canyon Trust, who supported suitability of this segment along with other eligible segments on this and other adjacent Forests.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Not applicable, as the county plan is silent on Wild and Scenic rivers in general and Pine Creek in particular. Designation would not be inconsistent with current forest plan.

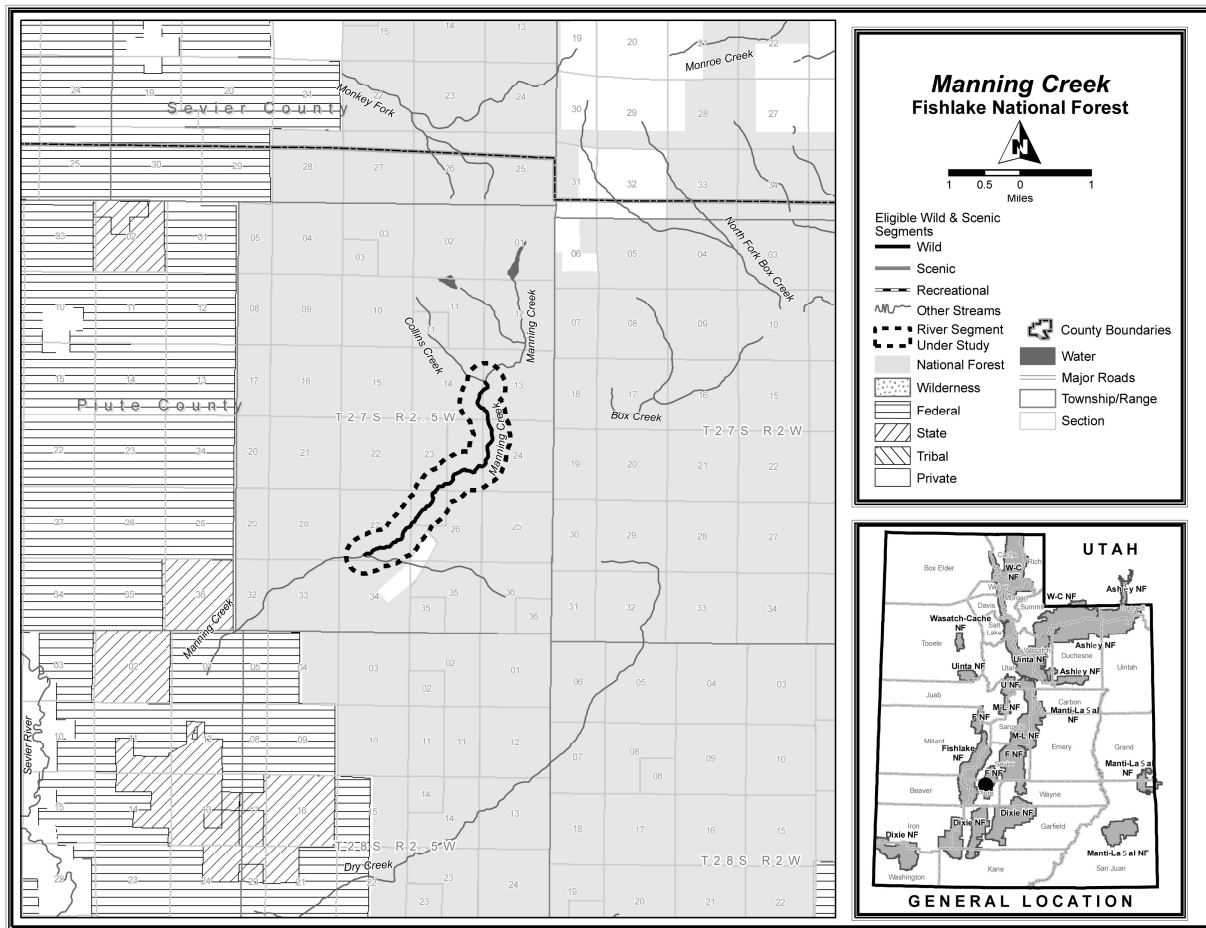
(5) Contribution to river system or basin integrity.

Designation of Pine Creek would not contribute to river system or basin integrity. No other portions of the river system or basin have been designated.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment.

No commitment has been expressed.

Manning Creek Suitability Evaluation Report (SER)



STUDY AREA SUMMARY

Name of River: Manning Creek

River Mileage:

Studied: 9.5 miles, Manning Meadows Reservoir to the Forest Service boundary near the Blackbird mine.

Eligible: 6.5 miles, downstream from the confluence of Collins Creek to the confluence of Straight Creek.

Location:

Manning Creek	Fishlake National Forest, Richfield Ranger District, Piute County, Utah		Congressional District 2	
	Start	End	Classification	Miles
Segment 1	SW ¼, NW ¼, Sect. 13, T.27S., R.2 ½ W., SLM	SE ¼, SW ¼, Sect. 27, T.27S., R.2 ½ W., SLM	Wild	3.8*

* The mileage of this segment has been changed from an ocular estimate of mileage to mileage that was calculated using GIS

Physical Description of River Segment: The watercourse flows southwest from the confluence of Collins Creek. The watershed has several springs that provide water to the creek in addition to releases from Manning Meadows Reservoir and Barney Lake. Manning Creek is characterized by deep pools

scoured by log and rock pourovers as well as undercut banks.

ELIGIBILITY

Name and Date of Eligibility Document: Fishlake and Dixie National Forest Wild and Scenic River Evaluation (addendum, 2007)

Determination of Free-flow: There are no known diversions of Manning Creek on National Forest within the eligible segment, below Manning Meadows Reservoir.

Summary of Outstandingly Remarkable Values:

Fish: Manning Creek supports an important population of Bonneville cutthroat trout. This native cutthroat trout requires good water quality and diversity of habitat. The State of Utah owns a water right for the stream, which supports instream flow. The canyon that holds the middle segment is very rugged, remote, and dominated by natural processes.

CLASSIFICATION

Basis for the Classification of River – Wild

No roads exist along this segment of Manning Creek.

SUITABILITY REPORT

Landownership and Land Uses – About 2,080 acres of National Forest Service System Lands are within the river corridor. The National Forest Service is the only land holder within the corridor of the eligible segment.

River Mile	Ownership	Acres
	Fishlake National Forest	2,080

The eligible segment passes through Management Area 4A (MA-4A) according to the Fishlake National Forest Plan. MA-4A has a management emphasis on fish habitat improvement. The area provides multiple uses.

Water Resources Development – No existing structures are known along the stream corridor within the eligible segment. There are no known plans for future water resources development. Designation into the Wild and Scenic river system does not affect existing, valid water rights.

Transportation, Facilities, and Other Developments – Manning Creek flows in a southwesterly direction on the National Forest for most of its length. Vehicular access to the creek exists at the upper end of the watercourse near Manning Meadows Reservoir. The Paiute ATV trail crosses the creek below Manning Meadows Reservoir. The lower 1-mile section of Manning Creek, to the Blackbird Mine, has road and ATV access. A foot/horse trail runs along the middle 6.5 miles of Manning Creek.

The entire eligible segment is within the Marysvale Peak inventoried roadless area.

Mineral and Energy Resource Activities – Blackbird Mine (inactive) is located along the lower 1-mile section of Manning Creek (below the eligible segment). There are no known proposals for mineral and energy resource activities.

Grazing Activities – This segment of Manning Creek passes through one active cattle grazing allotment (the Manning Creek Allotment). Actual livestock use along the eligible segment is very low.

Recreation Activities – The Paiute ATV Trail crosses Manning Creek below Manning Meadows Reservoir (above the eligible segment). Along the middle portions of Manning Creek, no known infrastructure exists. There is a non-motorized trail that follows the creek. The upper portion of this trail has received some ATV use. The upper portion of the creek and adjacent terrain have been used as a base

area for recreational activities such as hiking and camping. No developed campgrounds exist along the stream corridor.

Other Resource Activities – None

Special Designations – None.

Socio-Economic Environment – This segment of Manning Creek is in a remote part of Piute County (pop. 1,400). Piute County's largest employment sectors are agriculture, government, and non-farm proprietors.

Current Administration and Funding Needs if Designated – The current administering agency is USFS. No land acquisition would be necessary.

The following information is based on 2001 data, which doesn't account for inflation over the past six years, but is the best available data. If a river is designated as Wild, Scenic, or Recreational, the actual cost of preparing the comprehensive river management plan would average \$200,000 per plan for 86 segments, which would cost approximately \$17.2 million the first two to three years following designation. It was estimated that annual management costs for a high complexity river would be \$200,000; a moderate complexity river would be \$50,000; and a low complexity river at \$25,000. Using an average of complexity costs, it would cost the Forest Service around \$7.8 million annually for 86 segments. (Estimated Costs of Wild and Scenic Rivers Program - V. 091104)

SUITABILITY FACTOR ASSESSMENT

(1) The extent to which the State or its political subdivisions might participate in the shared preservation and administration of the river, including costs, should it be proposed for inclusion in the National System.

There has been no demonstrated or potential commitment to share preservation and/or administration.

(2) The state/local government's ability to manage and protect the outstandingly remarkable values on non-federal lands. Include any local zoning and/or land use controls that appear to conflict with protection of river values.

Not applicable, as all of the land through which the segment flows is federally owned.

(3) Support or opposition to designation.

The Sevier County Commission has continued to express opposition to designation. In response to scoping, some non-profit organizations have expressed support for designation because of the segment's fish habitat and wildlife value. All of the three organized campaigns supported a positive finding of suitability for this segment.

Again, comment letters received were generally opposed to designation of this segment. An exception is the Grand Canyon Trust, who supports the suitability of Manning Creek along with a list of other eligible segments on this and other adjacent Forests.

(4) The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Not applicable, as the county plan is silent on Wild and Scenic rivers in general and Manning Creek in particular. Designation would not be inconsistent with current forest plan.

(5) Contribution to river system or basin integrity.

Designation of this creek would not contribute to river system or basin integrity. No other portions of the river system or basin have been designated.

(6) Demonstrated or potential commitment for public volunteers, partnerships, and/or stewardship commitments for management and/or funding of the river segment. No commitment has been expressed.